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**THE IMPACT OF MINORITY STRESS AND CONCEPTUAL COMPLEXITY
ON DEVELOPING A POSITIVE GAY AND LESBIAN IDENTITY**

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**THE IMPACT OF MINORITY STRESS AND CONCEPTUAL COMPLEXITY
ON DEVELOPING A POSITIVE GAY AND LESBIAN IDENTITY**

by

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THE IMPACT OF MINORITY STRESS AND CONCEPTUAL COMPLEXITY ON DEVELOPING A POSITIVE GAY AND LESBIAN IDENTITY

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Contemporary research on gay men and lesbian women features an increased focus on the manifestations of antigay stigma in their lives. In particular, the development of gay and lesbian identity within a cultural context that may be shifting but remains one that includes intolerance, or at best, indifference (Garnets & Kimmel, 1993). Internalization of anti lesbian and gay prejudice has been termed “the most insidious” form of minority stress (Meyer & Dean, 1998). Most models of lesbian and gay identity suggest that these individuals follow a unique trajectory due to their experiences of prejudice and social oppression (Potoczniak, Aldea, & DeBlaere, 2007). One question not typically addressed by these models, however, is how homosexual individuals vary so markedly in their progression through the phases of sexual minority development and/or the degree to which that identity is a positive one. This study was an attempt to explore the relationship between minority stress, cognitive style, and lesbian or gay identity development.

272 adults identifying as a lesbian woman or gay man participated in this

study. A measure, The Lesbian and Gay Salient Experiences Questionnaire (LGSE), in order to examine the management of a sexual minority identity and the interactions or experiences related to identifying as a member of this population. Participants' lesbian or gay identity development and their capacity for cognitive complexity were also measured. Results yielded a significant relationship between three of the five scales of the LGSE and negative lesbian or gay identity but there was no relationship between conceptual complexity and negative identity. Significant sex differences were found on both the measure of negative identity and salient experiences with men reported higher levels on both. The relationship between salient experiences and negative identity were also different between men and women. This finding in particular suggests that men and women may not only have a different trajectory in forming their lesbian or gay identity, but that the experiential factors that influence their identity development may also be different. Therefore, further research is suggested in order to investigate whether gay men and lesbian women should be studied separately.

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CHAPTER ONE

INTRODUCTION

The landscape of psychological research on gay men and lesbian women has changed drastically from earlier days of universally pathologizing homosexuality. Following a concerted effort orchestrated by gay-affirmative mental health professionals and with the influence of empirical data and researchers such as Kinsey, homosexuality was removed from the Diagnostic and Statistical Manual (DSM) in 1973 (Bayer, 1981). Subsequent research on homosexuality began focusing on the characteristics, psychosocial concerns, and experiences of gay men and lesbian women. The past few decades of research feature an increasing focus on the manifestations of antigay stigma in the lives of lesbian women and gay men. Particularly, contemporary researchers in the area of homosexuality have taken an interest in the development of gay and lesbian identity within a cultural context that may be shifting but remains one that includes intolerance or, at best, indifference (Garnets & Kimmel, 1993). Internalization of anti lesbian and gay prejudice has been termed “the most insidious” form of minority stress for lesbians and gays (Meyer & Dean, 1998, p. 161). In line with this conceptualization, most models of sexual minority development (e.g., Cass, 1979; McCarn & Fassinger, 1996) suggest that lesbian and gay (LG) individuals follow a unique trajectory in terms of their development due to their experiences of prejudice and social oppression (Potoczniak, Aldea, & DeBlaere, 2007). While these models have helped normalize some

of the challenges associated with adapting to a stigmatized sexual orientation, one question typically not addressed is how or why it is that LG individuals vary so markedly on their progression through the phases of sexual minority identity development and the degree to which the formed identity is a positive one. In an effort to address this, more recent research has begun exploring the factors that promote or impede the successful integration of an LG identity (Peterson & Gerrity, 2004).

People construct their sexual feelings to the extent that they actively interpret and define their erotic yearnings using the systems of meanings available to them – typically those articulated by the wider culture (Gammets and Kimmel, 1993). What remains unclear, however, is what happens when the articulations of the larger culture do not match one's own, or why this incongruity seems easier for some to negotiate than others. There is no doubt that LG individuals experience 'minority stress,' defined as a state resulting from "...culturally sanctioned, categorically ascribed inferior status, social prejudice and discrimination, the impact of these environmental forces on psychological well-being, and consequent readjustment or adaptation" (Brooks, 1981, p.107). The extent to which membership of a marginal minority group and the subsequent experiences related to this status impacts the developmental process of acquiring a lesbian or gay identity are unknown. Furthermore, while individuals may vary in the degree to which they encounter experiences yielding minority stress, the factors influencing the severity of the negative impact these experiences have on the individual remain unidentified. Traditionally, the majority of research on LG individuals focused on identifying the trajectory of identity formation or theorizing about the impact of

compulsory heterosexuality and prejudice on the individual. Currently, there is a lack of empirical information regarding what individual characteristics might attenuate the impact of this minority stress. While individuals undoubtedly encounter varying degrees of prejudice or oppression, the possibility that certain factors mitigate the salience of these experiences remains unexamined. More specifically, there is a dearth of research examining what variables might account for why two individuals with exposure to similar levels of minority stress differ so markedly on their development of a positive sexual minority identity. One potentially important variable is cognitive style in processing information.

There is longstanding evidence that emphasizes the importance of subjective evaluation and cognitive appraisal as critical factors in shaping reactions to any encounter (Cooper & Payne, 1991). Cognitive models of appraisal treat stress as a psychological state expressed as an internal representation of a particular and problematic transaction between a person and their environment (Holroyd & Lazarus, 1982). Similarly, Meyer (1995) argued that minority stress arises from “the juxtaposition of minority and dominant values and the resultant conflict with the social environment” (p.39). There is an a priori case for arguing that cognitive styles influence the everyday experience of stress. Yet, empirical investigations of cognitive style and stress are rare, despite evidence suggesting that cognitive style may be just as important as other individual difference variables in explaining stress (Cooper & Payne, 1991). Cognitive style may not only be important to explaining appraisals of experiences as stressful or not stressful

but it may also have an impact on how these challenging events impact one's relationship with their identity.

In regards to identity, Uba (1994) first brought forth the notion that cognitive style may be instrumental in explaining variations in minority ethnic identity. Specifically, Uba argued that differences in how individuals process stimuli contribute significantly to how they think about, feel toward, and regulate their behavior in relation to identity. Furthermore, Uba proposes that implicit in minority identity models is the notion that as an individual progresses through the identity development process he or she gains greater sophistication in their perceptions related to identity. For instance, models of minority identity development (e.g., Atkinson, Morten, & Sue, 1989) suggest that in early stages of development, opinions about ethnic identity are less thought out, more concrete, and characterized by simplistic and dichotomous thoughts (e.g., majority culture = good, minority ethnic culture = bad). During later stages of development, minority individuals possess greater flexibility and are more complex in their approach to processing information related to themselves and larger culture. Empirical evidence linking conceptual complexity, a form of cognitive style, and identity formation also suggests a relationship between the two (Slugoski, Marcia, and Koopman, 1984). Conceptual complexity, or the capacity and willingness to acknowledge the legitimacy of competing perspectives on the same issue (differentiation) and to forge conceptual links among those perspectives (integration), is a form of cognitive style and important variable in Conceptual Systems Theory (Harvey, Hunt, & Schroder, 1961). As stated above, theoretical and empirical evidence suggests a link between conceptual complexity and

identity development. Similar to models of ethnic identity development, implicit in developmental theories of minority sexual identity development (e.g., Cass 1979, and McCarn & Fassinger, 1996) is the notion that later stages in these models imply greater differentiation and increased integration of previously disparate information. This indicates that a higher capacity for conceptual complexity is associated with later stages of LG identity development. Given the overlap between models of minority ethnic identity development and models of minority sexual identity development, one of the goals of this study is to explore the possible link between conceptual complexity and its impact on the formation of a positive sexual minority identity.

As stated previously, although some research documents variability in identity development, the particular individual or social contexts that predict these different patterns and changes in identity integration over time remain unclear (Rosario, Schrimshaw, & Hunter, 2008). Some of the available references seem to converge on the concept of experience as a significant source of influence. The concept of ‘experience’ includes subjection to minority stress, such as acts of prejudice and/or discrimination that are widely known to impact other minority population’s sense of self as suggested by Meyer (2003) and Atkinson, Morten, & Sue (1995) and can leave an indelible mark on a person’s sense of self regardless of whether it was directly experienced or indirectly observed. In developing the concept of minority stress, researchers’ underlying assumptions have been that minority stress is chronic, socially based, and unique -- furthermore, it is additive to general stressors that are experienced by all people (Meyer, 2003). Additionally, other experiences that trigger an awareness of one’s minority status

as well as effects of parental socialization are also identified as influential experiences (Phinney, 1990; Atkinson, Morten, & Sue, 1995). Yet, while there is little doubt as to the importance of these experiences as a factor in sexual minority identity development, variations in identity development cannot be solely attributed to the influence of experience. The exclusivity of experience as the sole influential factor is challenged on the grounds that the same experience does not necessarily engender similar effects in every individual who encounters it. An individual's interpretive process plays a significant role in determining the personal significance and relevance of a stressful event or experience. Hence, cognitive approaches to information processing may account for how individuals vary in their identity development, particularly when their experiences are similar. It is on the basis of this argument that the question was raised as to whether cognitive factors may affect sexual minority identity development, either directly, or in concert with experience. Conceptual complexity, or the individual capacity to differentiate stimuli and to re-integrate them into higher orders, was proposed as a potential factor that interacts with experience (specifically, minority stress) in influencing lesbian and gay identity development. Specifically, these experiences of minority stress impact the degree to which an LG individual develops a *positive* identity related to their sexual minority status.

Because sexual minority identity development as conceptualized in models by Cass (1979) and McCarn & Fassinger (1996) imply greater complexity in their progression, it was hypothesized that conceptual complexity serves as an explanation for the distributions along the positive identity development continuum for lesbian women

and gay men. Conceptual complexity per se may not determine sexual minority identity development; rather, it may also interact with experiences of minority stress to effect variations in positive identity development for LG individuals. Frequently, minority-related experiences present discrepant and inconsistent information of which individuals must make sense of in order to arrive at a congruent understanding of what the experience means, and also how it impacts their sense of self (Meyer, 1995). Conceptual complexity allows individuals to negotiate this type of conflict. It was hypothesized that at higher levels, the presence of conceptual complexity would alter the strength of the relationship between experiences of minority stress and positive sexual minority identity development.

Mohr and Fassinger (2000) developed a 27-item instrument measuring six aspects of gay and lesbian identity discussed in the theoretical and clinical literature. Analysis of the measure revealed a second-order factor, which they termed “Negative Identity.” This factor is interpreted as a reflection of the degree to which individuals have overall difficulties related to their sexual identity as it relates to their sexual orientation. Negative Identity was utilized as the main outcome variable in this study. To quantify experiences of the minority stress experienced by gay men and lesbian women, a measure was created specifically for use in this study. The instrument, Lesbian and Gay Salient Experiences Questionnaire (LGSE), consisted of 4 subscales: Heightened Awareness, Negative Affect, Victimization, and Family of Origin. To measure conceptual complexity, the Paragraph Completion Test (PCT) was administered to all subjects.

Purpose

While the field of psychology and research on lesbian women and gay men has evolved tremendously, there are significant gaps. Most notably is how or why individuals vary so markedly in their process of accepting their homosexuality and the possible factors that contribute to this variability. This study was an effort to further this type of research. While humans are immensely complex and the reasons behind anyone's sense of self may never be truly measured or deciphered, the hope is that this specific study can contribute to the conversation of why some individuals take their identity as an LG individual in stride, or perhaps even see it as a source of pride, while others continue to grapple with self-doubt, shame, and internalized homophobia. An additional gap or limitation in the research on gay and lesbian individuals is that men and women are frequently lumped together and it is presumed that the identity development process is similar for each sex. This study also looked to investigate the legitimacy of this presumption by comparing the data of men and women to one another and looking at each sex separately as well.

In order to address the gaps outlined above, the purpose of the present research was to undertake an empirical investigation of the relationship among minority stress and other salient experiences, cognitive style, and minority sexual identity development. In particular, this study explored the relationships that exist between experiences and variations in positive LG identity formation among lesbian women and gay men and

examined the ways in which cognitive style, specifically conceptual complexity, influenced the acquisition of a positive LG identity. In addition, an interactive or moderating effect of conceptual complexity on the relationship between minority stress and other salient experiences and positive LG identity formation was explored.

RESEARCH QUESTIONS

- 1) Explore the validity and reliability of the measure created for this study, the Lesbian and Gay Salient Experiences Questionnaire (LGSE)
- 2) Is there a relationship between aspects of lesbian and gay salient experiences and Negative LG Identity?
- 3) Is there a relationship between conceptual complexity and Negative LG Identity?
- 4) Is there a moderating or interactive effect of salient experiences and conceptual complexity on Negative LG Identity?

CHAPTER TWO

LITERATURE REVIEW

Lesbian and Gay Psychology

Lesbian and Gay (LG) psychology recently emerged as an area of interest and is included as an acknowledged psychological variable (Greene & Herek, 1994). Now, decades after APA policy changes regarding the de-pathologizing of homosexuality, gay men and lesbian women are no longer an invisible and silent minority; moreover, they have assumed a higher level of visibility among those who seek professional psychological services (Greene & Herek, 1994). Unfortunately, despite the changes in diagnostic nomenclature, other aspects, such as clinical practice, research, and training, continue to operate out of both bias and misinformation about lesbian women and gay men, their lifestyles, concerns, and clinical needs (Garnets & Kimmel, 1993; Markowitz, 1991). The exact population of gay men and lesbian women in the United States is difficult to estimate. Studies on gay and lesbian populations in the United States offer estimates that vary from 1 to 9 percent of the general male population and 1 to 5 percent of the general female population (Bohan, 1996).

Overview and History of Research

Until the 1970s, the vast majority of psychological research on homosexuality focused on its presumed psychopathology. This early research supported the view that homosexuality was related to mental illness. The original issue of the American

Psychological Association's (APA) *Diagnostic and Statistical Manual* (DSM), published in 1952, included homosexuality in the approved list of mental disorders, classifying it as a sociopathic personality disorder (Bohan, 1996). Only a few pioneers stood out as questioning the pervasive and dominant models that viewed homosexuality as a sign of mental illness. Beginning in the 1950s, researchers such as Evelyn Hooker began utilizing empirical evidence to dismantle the contention that homosexuality was inherently pathological. Early research samples of homosexuals were drawn from prisons and patients in psychotherapy; not surprisingly, these individuals were found to be less well-adjusted than the average, heterosexual person. In 1957, Hooker devised a study comparing heterosexual men to a sample of matched homosexuals (as opposed to imprisoned or psychiatrically disturbed) and found no difference in their adjustment. In her study, a panel of psychiatrists and clinical psychologists were unable to distinguish between the responses of homosexual versus heterosexual subjects (Troiden, 1989). The work of Alfred Kinsey also brought an investigative, rather than pathologizing and condemning, view to research on human sexuality by verifying the existence of the heterosexual-homosexual continuum (1948, 1953). However, the 1968 version of the DSM still listed homosexuality as a mental disorder. It was simply re-categorized from sociopathic to a "sexual deviation." Following a concerted effort orchestrated by gay-affirmative mental health professionals and empirical data, the APA removed homosexuality from its list of mental disorders in 1973 (Bayer 1981). However, in 1977, Morin coined the phrase "heterosexist bias" in his documentation of the preconceptions and prejudices that continued to dominate the field at the time. He defined this bias as "a

belief system that values heterosexuality as superior to and/or more ‘natural’ than homosexuality” (p. 631). Subsequent psychological research on homosexuality shifted its focus away from pathologizing and/or seeking to uncover its causes. Instead, researchers focused on the characteristics, psychosocial concerns, and most saliently, development of identity of lesbian women and gay men (Bohan, 1996).

The sexual identity development of LG individuals, frequently referred to as the “coming-out process” has become the focus of a growing theoretical and empirical literature. How the identity development should be conceptualized is also an ongoing research topic in lesbian and gay research. Identity development models for sexual minorities have been discussed in the literature from the early notions of stage development to more fluid models for identity acquisition (Degges-White et al., 2000; Garnets 2002; McCarn & Fassinger, 1996; Rosario, Schrimshaw, & Hunter, 2004). Several theories attempt to operationalize “coming out” and acknowledge that it is part of a more complicated developmental process. This process typically begins with a period of uncertainty and questioning, and eventually ends with the integration of an established sexual orientation into the rest of his or her identity. Later in this chapter, theoretical frameworks and models for identity development is examined more closely.

A Different Kind of Minority

Much like other marginalized groups, gay men and lesbian women are a largely oppressed and stigmatized population. As a community, this makes them similar to members of other minority populations (e.g., African-Americans, Latinos, etc.). However, there are several key differences. The first being that, unlike members of a

minority racial or ethnic group, gay and lesbian individuals are rarely raised in households where parents mirror their same 'difference.' In other words, the vast majority of gay and lesbian individuals are raised by heterosexual households and with heterosexual norms. Thus, LG individuals are not offered the ameliorating effect that parents, grandparents, or community can have on teaching the individual how to handle the strains of their minority status. Another key difference relates to timing. Most members of minority communities are aware of their minority status as children; in contrast, many (but not all) gay men and lesbian women are typically not acutely aware of their 'difference' until adolescence or later on in adulthood. Thirdly, the process of discovery of 'difference' is a largely internally fueled one. In most situations, gay and lesbian individuals begin the journey of discovery, understanding, and integrating their minority status utterly alone. Moreover, no one else can define a person's sexuality for them. It is intangible and elusive and more of a construct than something objective or definable. Lastly, lesbian women and gay men differ from other racial or ethnic groups in terms of their visibility. An African-American cannot necessarily hide his or her skin color; in contrast, a lesbian woman or gay man, can "pass" and not make visible their minority status or (at least to a certain extent) have the choice of whether or not (or how much) to expose themselves (Gonsiorek, 1995).

The precise ways in which these unique aspects of sexual minority identity complicate, prolong, or otherwise leave their mark in LG people's self-understanding and sense of identity are vastly unknown. What can be inferred, however, is that the complexity of discovering and subsequently accepting one's minority status lends itself

to great variability in how individuals navigate the process. Undoubtedly, a variety of factors influence this complicated process for LG individuals. This study was an effort to further the research on LG identity by examining how cognitive processing influences the development of a positive identity. Specifically, how individuals incorporate experiences related to their sexuality into their identity development. The hope was to provide some insight into why there is such variety in the ease with which individuals navigate the LG identity development process.

Models of LG Identity Development

Building on Erikson's (1950) concept of identity crisis, Marcia's (1993) theoretical work is the basis for much of the past few decades of identity literature. Marcia (2001) stated that there is a need to pay particular attention to the identity of special or unique populations, such as lesbian women and gay men. It is not unusual for LG people to depart from traditional patterns of identity development during adolescence and early adulthood and face unique struggles as they develop their identities (Evans & D'Augelli, 1996; Savin-Williams, 2001; Kimmel, Rose, & David, 2006). Within a heterosexist majority culture, the process of identity formation becomes a critical undertaking for lesbians and gays to develop a self-concept and facilitate a sense of belonging (Ritter & Terndrup, 2002).

Whether sexual orientations are established before birth (Bell, Weingberg, and Hammersmith, 1981a, b), grow out of gender role preferences established between the ages of three and nine (Harry, 1992), or are the consequence of a variety of unknown and intangible factors, the meanings of sexual feelings are not self-evident. They require

construction. People construct their sexual feelings to the extent that they actively interpret, define, and make sense of their erotic yearnings using systems of sexual meanings articulated by the wider culture (Gammets and Kimmel, 1993). What remains unclear, however, is what happens when the articulations of the larger culture do not match one's own, or why this incongruity seems easier for some to manage than others.

The past few decades have witnessed various attempts at defining and understanding the process through which gay and lesbian individuals attain their identity within this culture of unacceptance. These models derive largely from Atkinson, Morten, and Sue's (1979) model of minority identity development (Brown, 1995). These "stage theories" attempt to identify the steps by which individuals learn, within the social context, to identify with others that are lesbian or gay. The biggest strength of stage models is their power to describe how the development of one's sexual self is an on-going process of constant interaction and interchange between internal reality and external cultural context (Brown, 1995). It was not the intent of the current author to describe in detail all the existing models of LG identity development. Instead, the pioneering model of LG identity, the Cass Model (1979), and the most prominent model over the past few years, the McCarn & Fassinger Inclusive Model (Fassinger, 1998; Fassinger & Miller, 1996; McCarn & Fassinger, 1996) were examined. Both models were used as theoretical basis for this study, as they both emphasize the integration aspect of forging a positive LG identity. However, an instrument developed by McCarn & Fassinger was used as the outcome measure due to some of the limitations of Cass' model.

Cass' Model

Perhaps the best-known description of gay and lesbian identity formation is found in the work of Vivienne Cass (1979, 1990). Her model identifies characteristic stages of identity formation and proposes that identity foreclosure, which effectively stalls development, may occur at any stage. Cass (1979) grounded her model on interpersonal congruency theory. This theory is based on “the assumption that stability and change in human behavior are dependent on the congruency or incongruency that exists within an individual’s interpersonal environment” (p. 220). In other words, Cass asserted that consistency or inconsistency between how individuals see themselves and how they perceive others as seeing them shapes the course of identity formation.

This model presupposed that everyone first sees himself or herself as heterosexual by default. The incongruity that arises when same-sex experiences or feelings challenge that certainty results in the first stage of gay and lesbian identity: *Identity Confusion*. During this phase, the person begins to consider the possibility that he or she may be gay/lesbian. This possibility may then be disavowed, and leads to the individual denying or reframing the experience to make it compatible with a heterosexual sense of self. Or, the individual might also believe that he or she is gay/lesbian, but find the identity unacceptable, resulting in identity foreclosure. Alternatively, the individual may feel sufficiently comfortable with the emerging same-sex feelings and seek out further information.

As the individual labels the incongruence as having to do with homosexuality, he/she moves into *Identity Comparison*. Here, the individual considers whether or not he or she is homosexual. As the individual struggles to define who they are, the awareness of the implications of that identity are heightened. Feelings of alienation and a sense of “not belonging” typically appear during this stage. The third stage of the process, *Identity Tolerance*, occurs as the individual tolerates (but not yet fully accepts) a gay or lesbian self-image. With this stage comes a degree of relief from uncertainty. On the other hand, this increased commitment to a gay or lesbian identity highlights the discrepancy between how the individual views themselves and the way they are perceived by others. During this stage, individuals typically seek out other gay or lesbian individuals or communities to reduce their isolation. The fourth stage, *Identity Acceptance*, is accompanied by a sense of belongingness and normalcy with one’s identity and an increased sense of connection within the lesbian and gay community. The fifth stage, *Identity Pride*, is characterized by tendencies toward dichotomous thinking as the world is either seen as “pro-gay” or “anti-gay.” It is not uncommon for the individual to feel a deep sense of pride toward the lesbian and gay community, while anger is directed at the rest of society. Ultimately, if an individual reaches the final stage, *Identity Synthesis*, the rigidity of viewing the world dichotomously dissipates. At the same time, the boundaries between public and private identities as well as those between sexual identity and daily life no longer need to be maintained, allowing for greater integrity in one’s sense of self (Bohan, 1996).

Limitations of Cass’ Model

A common critique of Cass' and other pioneering models of LG identity development is the assumption that the process is linear. The difficulties inherent with this notion lie in the current trend towards dropping the concept of a fixed identity in favor of recognizing greater flexibility in the process (Sophie, 1987). Hence, Brown (1995) concluded that linear models might be too "simplistic," underscoring the complex nature of gaining awareness and integrating a lesbian or gay identity into one's sense of self. A second limitation to Cass' model is the lack of empirical evidence to substantiate it. Thus, while conceptually appealing, the lack of empirical testing calls into question how these constructs can be operationalized. Thirdly, Cass' model emphasizes self-disclosure as a necessary developmental task in the identity formation process. To the contrary, given the contextual nature of this construct, many researchers report some inherent problems with making public disclosure a requirement for the "successful" integration of homosexual identity (Anderson & Mavis, 1996; Waldner & Magruder, 1999). In particular, Fassinger (1995) argues the following:

"the models tend to imply that fully integrated and mature identity necessitates full public disclosure and political activism. Such a stance ignored the cultural location, life choices, and environmental constraints of lesbians and gay men diverse in age, historical context, geographic location, race and ethnicity, class, religion, and other forms of demographic diversity that exert a profound impact on the identity development process." (p.152)

Usefulness of Cass' Model

Despite the aforementioned limitations to Cass' model, it was still theoretically useful for the purposes of this study. The first critique, that the model is linear, was inconsequential to the purposes of this investigation in that the instrument used here to

quantify LG identity (LGIS; Mohr & Fassinger, 2000) does not place an emphasis on what particular stage an individual is at. The second critique, the lack of empirical evidence validating or difficulty in operationalizing it does not automatically dismiss its legitimacy; additionally, an instrument with empirical validation was employed in this study. Thirdly, regarding the emphasis on disclosure, while Cass did identify disclosure as an important step, the greater emphasis was placed on achieving a synthesized, or integrated LG identity. In addition, a strength of the Cass model is that it attempts to identify some of the cognitive processes associated with the identity formation process. Lastly, Cass' emphasis on the possibility of negative experiences impacting the identity formation process was an important consideration, in particular for this study.

McCarn & Fassinger's Inclusive Model

McCarn and Fassinger's (1996) theory of sexual minority development attempts to address several of the aforementioned concerns in order to promote a more rigorous articulation of the LG identity process as well as its subsequent operationalization. First, the authors preferred to address the developmental process in terms of phases, instead of stages, promoting greater flexibility in the process. Furthermore, although the model is depicted as a progression, the authors specified that the process is considered continuous and circular. That is, an individual may revisit their sexual identity when confronted with a new relationship or new/different contexts. Secondly, the model distinguishes between two separate processes – personal identity development and group membership identity development. Thirdly, although they concede that some degree of disclosure is needed

for the last phase of group membership identity, disclosure is not seen as a crucial step for “successful” identity acquisition.

McCarn & Fassinger (1996) proposed a four-phase model with two parallel processes. Similar to Cass’ and others’ models, this model presents phases in a sequential manner, starting with a growing awareness of difference from heterosexual norms in the self and others in society, and ending with an internalized sense of love to a same-sex other and also an identity as a member of the LG community. Thus, this model has a contextual element to it where the individual not only grapples to understand a sexual identity “that they previously considered reprehensible and/or irrelevant,” (p.16) but must also “acknowledge their membership in, and change their attitude toward, a largely invisible minority group that they also previously considered reprehensible and/or irrelevant” (p.16). In having two branches, the authors stress that identity development is a mixture of self-categorizations related to both personal and social identities. In other words, the theory posits that one’s same-sex attraction prompts exploration and eventually commitment to both an individual sexual identity (“Am I lesbian/gay?”) and a group identification/membership (“What does it mean to be a member of the lesbian/gay community?”). In operationalizing the two branches, the individual and group processes were described as “reciprocally catalytic but not simultaneous” (p. 521). There are four phases for the two parallel processes: (1) awareness, (2) exploration, (3) deepening/commitment, and (4) internalization/synthesis.

Following is a description of the four phases of the individual sexual identity branch. First, during *Awareness*, an individual may begin to become aware of subtle

differences and/or start to feel “different.” While this phase can elicit confusion in the individual, he or she may not necessarily be able to ascribe meaning to the thoughts or feelings. During *Exploration*, the individual develops strong relationships with, or feelings about, other people of their same sex or perhaps a specific person. A gay man might think, “I want to be closer to men or a certain man” (p. 17). This phase might consist of articulating feelings, but does not necessitate acting on them. In the third phase, *Deepening/Commitment*, the individual’s sexual and emotional self-knowledge increases, as they recognize their preferred forms of intimacy involving same-sex partners. This phase has the potential for dichotomous thinking, much like Cass’ Identity Pride stage. Nonetheless, the individuals in this phase make movements towards self-acceptance while further examining those aspects of the self. The model’s final phase, *Internalization/Synthesis*, is marked by the integration of same-sex desire/love as a normal part of one’s overall identity. This phase is also strikingly similar to Cass’ final stage, Identity Synthesis (Ritter & Terndrup, 2002).

In regards to the group identity branch, the phases parallel the individual steps. During *Awareness*, the individual begins to become cognizant that the heterosexual norm may not apply to everyone. This phase might include bewilderment at the “invisibility” of other sexual orientation subcultures within society. In the *Exploration* phase, the individual might explore their own personal beliefs and attitudes towards the reference group, as well as their potential membership. The individual continues to generate an understanding of the group as a whole and how/if she would define herself in this group. Progression into *Deepening/Commitment* includes two aspects of awareness: value in

belonging to the reference group, as well as the possible consequences of being part of a stigmatized population. An increased sense of the heterosexism and oppression in society can result in feelings of anger or sadness. Phase four, *Internalization/Synthesis*, includes an individual's acceptance and recognition that he/she is a member of this group and the identity is fully internalized into a larger overall concept of self, traversing contexts. This process of internalizing and synthesizing is characterized by feelings of comfort. Identity self-disclosure to others has a greater likelihood of taking place during this phase (Ritter & Terndrup, 2002).

Factors That Influence LG Identity Development

With considerable attention paid in the literature to the process of sexual identity development, little is known about the factors that influence it. Although some research documents variability in identity development, the particular individual or social contexts that predict these different patterns and changes in identity integration over time remain unclear (Rosario, Schrimshaw, & Hunter, 2008). Some of the available references seem to converge on the concept of experience as a significant source of influence.

Experiences of prejudice and/or discrimination are widely known to impact other minority populations' sense of self, as suggested by Uba (1994) and Atkison, Morten, and Sue (1995) and can leave an indelible mark on a person's sense of self, regardless of whether it was directly experienced or indirectly observed. A second type of experience, one of self-awareness of sexual identity, should also be considered. Although these types of experiences might lack the overt malice or prejudice described above, they are still salient. Some examples of this might include being asked about one's sexuality or

presumed sexuality (“are you married?”), watching a member of one’s sexuality portrayed on television, becoming aware that one is the only gay or lesbian person in a social situation, etc. These experiences are common, and kindle thoughts about the significance of one’s sexuality and identity. Thirdly, one type of experience referred to in passing by Atkinson, Morten, & Sue (1995) and Phinney (1990) alludes to parental socialization. They theorize that the attitudes associated with how a person should think or feel about their minority identity come frequently from the messages imparted by parents and authority figures.

The measure created for use in this study, Lesbian and Gay Salient Experiences (LGSE) reflected the three areas cited above as the types of experiences pertinent to minority identity formation. A fourth subscale was included to measure affective responses to such experiences. The rationale behind including this subscale was the idea that compared to mundane experiences, events experienced as more affectively intense are also more likely to be processed further and incorporated into one’s identity to a greater extent (Green & Sedikides, 1999).

Minority Stress and Salient Experiences

Minority stress refers to the increased stress and resultant impact on overall psychological functioning that minority group individuals experience as a result of being members of a stigmatized group (Brooks, 1981; Meyer, 2003). The concept of minority stress was originally developed out of social stress theory and addresses the impact of social prejudice and stigma on targeted individuals and groups. According to minority stress theory, when LG individuals have experiences that reinforce their minority (i.e.,

inferior) status, “the stimulus of minority stress is evoked, which engenders psychological distress” (Waldo, 1999, p. 219). Day to day discrimination and lifetime perceived discrimination have been identified as core stressors among ethnic minorities, women, and LG individuals. In a recent report by the Kaiser Family Foundation (2001), 74% of LG participants reported personally experiencing verbal abuse or name calling at some point in their lives, 32% reported experiencing physical violence against themselves or their property, and 55% reported that they or someone they knew had experienced sexual orientation discrimination in applying for or keeping a job. Additionally, Mays and Cochran (2001) found that gay men and lesbian women were much more likely to perceive that others disrespected them.

Merton (1968) suggested that society itself can be a stressor by upholding values that are in contrast with, or inaccessible to, certain individual members of society. Commonly for sexual minorities, the norms and structures of the dominant culture are not applicable (e.g., lack of a marriage equivalent for gay and lesbian partners in most states) (Meyer, 2003). Lazarus and Folkman (1984) discuss this conflict between the person and his/her environment as the core of all social stress. Specific to minorities, Meyer (1995) argued that minority stress arises from “the juxtaposition of minority and dominant values and the resultant conflict with the social environment” (p. 39). According to this definition it is not necessarily inferior status, but rather conflicting ideologies, that cause stress. In his minority stress model, Meyer (2003) emphasizes that this mismatch between the individual and the dominant culture can be significant, and the stress overwhelming.

Minority Stress and LG Identity

In recent years, researchers have demonstrated that there is a relationship between gay identity and gay-related discrimination (Reyest, 2001). It has also been asserted that the identity development process assists gay and lesbian individuals in coping with the impact of minority stress (Morris, Waldo, & Rothblum, 2001). In accordance with this, one's minority identity is purported to either strengthen or weaken the impact of stress on the individual, depending on the prominence, integration, and valence of the identity (Meyer, 2003). Identity prominence and integration refer to the degree which the minority identity (e.g., gay or lesbian) is primary in an individual's self understanding. The more the minority aspect(s) are integrated into an overall identity (e.g., Cuban-American lesbian graduate student and mother of two), the more protected that individual is against the threat of minority stress. Identity valence refers to the self-evaluative aspect of one's minority status/identity. Those who view this aspect of themselves negatively are expected to have greater stress and poorer overall psychological functioning than those with a more positive stance (Meyer, 2003).

Yet, while there is little doubt as to the importance of minority related stress as a factor in sexual identity development, variations in sexual identity development cannot be solely circumscribed to the influence of these experiences. The exclusivity of experience as the sole influential factor is challenged on the grounds that the same experience does not necessarily engender the same effect in every individual who encounters it. To

assume the opposite, that individuals who have the same type of experience will be influenced similarly, is to assume that individuals are passive recipients. This contradicts the fairly widely accepted psychological tenant that an individual's interpretive process plays an influential role in determining the personal significance and relevance of an event or experience. It is on the basis of this argument that the question was raised as to whether other factors may affect sexual identity development, either directly or in concert with experiences of minority stress.

One such factor warranting consideration is an individual's cognitive style towards processing information and experience. Uba (1994) brought forth the notion that cognitive style is an important factor in ethnic identity development. She argued that, "a person must have certain cognitive abilities...in order to develop a basic consciousness of ethnicity but beyond that, some individuals develop a more complex sense of ethnic identity than others. In this sense, developmental differences have to do with growing sophistication in a person's thinking process rather than with age" (p. 194). Thus, evolvement towards a more complex notion of identity is not age-dependent, nor does it happen on its own merely through the passage of time and experience. There are undoubtedly countless factors that might serve to facilitate or impede the development of a more complex sense of identity. Some of these factors are external, with experience (as described above) being the most obvious example. Other factors are likely more internal, e.g., individual traits. Specifically, individual differences in cognitive style represent possible factors in explaining variation in identity development. Moreover, in Meyer's (1995) conceptualization of the relationship between experiences of minority stress and

LG identity, he argued that the more integrated a person's identity is, the more buffered that person will be from the impact of minority stress experiences. The ability to integrate different aspects of a situation, identity, or problematic circumstances, is an important aspect of conceptual complexity.

Conceptual Complexity

A large body of experimental evidence indicates that in making interpretations of stimuli, people often rely on simple heuristics or rules of thumb when making decisions (Einhorn & Hogarth, 1981; Nisbett & Ross, 1981). Cognitive style refers to the psychological construct that mediates the process between stimuli and response. More specifically, it is the manner in which individuals automatically or unconsciously process information using inferential and retrieval processes. Cognitive style also refers to the tacit assumptions, beliefs, commitments, and meanings that influence habitual ways of construing oneself and the world (Markus & Smith, 1981). In their study, Taylor and Crocker (1981) noted that cognitive structures, an aspect of cognitive style, serve several coping objectives including helping individuals identify stimuli quickly, categorize it, fill in missing information, and find strategies for resolving conflict. Under stress, cognitive structures can act as templates that influence the way in which situations are appraised and guide cognitive-affective processes and coping behaviors (Beck, 1984).

Conceptual Systems Theory (CST; Harvey et al., 1961) defines these cognitive structures as the unique organizing, experiential filters through which experienced events are screened, gauged, and evaluated. CST proposes that individuals progress through stages ranging from concreteness to abstractness and dependency to interdependency.

The first stage is characterized by rigid adherence to external standards, an avoidance of unstructured situations and difficulty processing ambiguous information; at the final stage, individuals are able to explore, question, and modify without experiencing the refutation associated with earlier stages. Abstract functioning is less categorical in this stage and it has greater potential to mobilize under the duress of stress (Harvey et al., 1961). Previous studies demonstrated that more concrete individuals have a greater intolerance for ambiguity and score higher on authoritarian-dogmatism measures (Harvey et al., 1961).

Conceptual complexity is a cognitive style variable and a concept derived from Conceptual Systems Theory. Conceptual complexity refers to a set of stable and predictable tendencies to process information in particular ways (Suedfeld & Coren, 1992). It is further defined as the characteristic ways in which individuals group stimuli together to conceptually organize and structure their environment (Goldstein & Blackman, 1978). Conceptual complexity can be defined in terms of two variables: differentiation and integration. Differentiation refers to the ability to extract dimensions or characteristics of a problem or situation. It is an individual's capacity to distinguish more than one dimension of a particular stimulus and view that stimulus from more than one perspective (Coren & Suedfeld, 1995). Integration is how one develops complex connections among differentiated characteristics. This can be accomplished by "perceiving the various dimensions as associated by interactions, combinations, trade-offs, or as parts of some larger superordinate entity or concept" (Coren & Suedfeld, p.230). Differentiation is a necessary, but not sufficient, precondition for integration. The

ability across individuals to differentiate and integrate stimuli ranges from concrete (low differentiation/low integration) to abstract (high differentiation/high integration).

Although similar types of rules might be used for either process, it is important to distinguish them based on whether they are relevant for separating (differentiation) or combining (integration). The level of abstractness of the rule is also important. As an aspect of personality, interpretations of conceptual complexity tend to view it as stable and enduring, thus labeling it a “trait” variable (Suedfeld & Coren, 1992).

According to Schroder et al. (1967) individuals with higher capacities for conceptual complexity possess an information-processing style which may enhance conflict resolution because they make finer discriminations of situational attributes, view situations from multiple perspectives, and rely more on internally developed standards. For instance, evaluating troublesome situations in a more complex fashion facilitates the ability to suspend judgment or to reinterpret an initially distressing event. This relates to the capacity to integrate, also an aspect of conceptual complexity, and why it is theorized to increase tolerance for conflict. More specifically, integration enables individuals to interrelate seemingly dissonant information which allows them to make new and varied interpretations of the same event (Bruch, Juster, & Heisler, 1982).

Conceptual Complexity: Measurement and Research

Although several procedures exist to measure conceptual complexity, the most commonly used and best validated method is the Paragraph Completion Test (PCT; Schroder, 1971). The PCT presents subjects with a series of stems, each of which is the beginning of a sentence (e.g., “Rules...” or “When my friend acts differently...”); or

alternatively, the PCT can present subjects with open-ended questions. Depending on the experiment, time limits or sentence requirements vary. The content of the stems may also be adapted to meet the specific needs of the study. A score of 1 (low) is assigned to a single-rule, un-differentiated response up through a score of 7 (high) for a response that is both differentiated and highly integrated (Coren & Suedfeld, 1995).

According to Harvey et al (1961), “abstract functioning is resistance to stress” (p. 119). Research has found that greater concreteness, in contrast to greater abstractness, to be associated with: (1) a greater tendency towards absolute, less cognitively complex internal standards (Ware & Harvey, 1967); (2) a greater tendency towards polarized evaluations, namely, ‘good-bad, right-wrong’ (White & Harvey, 1965); (3) a greater dependency on authority related cues (Harvey, 1964); and (4) greater intolerance for ambiguity (Harvey, 1966). Tetlock, Peterson, and Berry (1993) found that cognitively complex individuals tend to be more open minded and flexible thinkers who actively seek out information.

In relation to identity, Slugoski, Marcia, and Koopman (1984) used the Paragraph Completion Test (PCT) to assess conceptual complexity and compared it to ego identity status. Results suggested that higher levels of conceptual complexity were associated with high identity statuses, i.e., moratorium and achieved identity. On the other hand, the authors also found that for subjects rated as more concrete in their cognitive complexity, their responses tended to be rule-bound, their identities less ‘evolved,’ and their decision making style more impulsive in the service of quick and unambiguous closure (Slugoski, Marcia, & Koopman, 1984). This relates to Marcia’s concept of identity foreclosure, an

important principle in Cass' theory of LG identity development as well. In tracking the progress of an individual through LG identity stages or phases, it is evident that the capacity to hold contrasting beliefs (either within the self or the self against mainstream society) is crucial to accepting one's identity as a lesbian woman or a gay man.

Conceptual Complexity and LG Identity Development

Across minority sexual identity development theories (e.g., Cass Model, McCarn & Fassinger Model), the earliest stages are marked by an unexamined existence within heterosexist majority culture and unquestioned acceptance of the views held by that majority. Up until this point, individuals have conformed to identities prescribed for them by the heterosexual majority (Ritter & Terndrup, 2002). Thus, there is little differentiation in the attitudes during this stage of development. Differentiation becomes evident in the middle phases of development, as confusion and conflicting attitudes emerge with respect to the self and heterosexist majority culture. During this conflict, individuals may feel isolated from majority culture and distinguish between their attitudes and values and those held by the mainstream heterosexual culture they live in. Commonly, they develop "a sense of 'not belonging' to society at large as well as to specific subgroups such as family and peers" (Cass, 1979, p.225). Part of the process during these stages requires distinguishing oneself from others with respect to sexual orientation (further differentiation).

As individuals continue their transition through these middle phases, acceptance of a gay or lesbian self-image increases. In concert with this increasing acceptance, further differentiation and integration takes place as individuals negotiate what elements

from the dominant culture can be trusted or are still applicable to them, and what should be questioned or disavowed. Simultaneously, individuals negotiate some level of discrepancy between their public identity (frequently a presumed heterosexuality) and their private sense of self. In conjunction with greater comfort with their LG identity, levels of minority stress can increase as lesbian women and gay men's status as a minority becomes exposed and subject to heterosexist culture (Meyer, 2003). This highlights the potential relationship between one's capacity for conceptual complexity and LG identity in that as one grows more comfortable with their LG identity, they will also require tools to combat the increased experiences of minority stress they may encounter as a consequence. Conceptual complexity also serves the individual as he or she transitions through the LG identity development process because it is associated with capacity to tolerate conflict, stress, and view situations from multiple perspectives. The process of acquiring an LG identity can be reframed as a process of enduring conflict – first an internal conflict, and later a conflict between oneself and mainstream culture. The process also requires a significant capacity to tolerate ambiguity and integrate new aspects of oneself into a larger self-concept. These are all aspects associated with conceptual complexity.

In line with this conceptualization, among LG identity theories there is significant consensus that the final stage in development is characterized by a synthesis or integration of identity. For example, Cass' final stage is characterized by an ability to integrate one's private and public identity and by doing so, integrates his or her gay identity into an overall self-concept. Lesbian women and gay men are now able to

acknowledge potential similarities between themselves and their heterosexual counterparts, as well as possible differences between themselves and members of their own community. Possession of a positive sense of one's self as an LG individual assumes the ability to evaluate more information simultaneously than if one were to continue to struggle with the identity development process.

Theoretically, once a positive sense of identity is achieved, individuals emerge with an integrated sense of self-worth as an individual, a member of a minority group, and an equal member of society at large (Ritter & Terndrup, 2002). At this level of identity development, lesbian women and gay men display both high differentiation and high integration in their self-conception. Complete congruence with one's gay or lesbian identity might not be possible due to society's pervading messages about the normalcy of heterosexuality. However, the incongruence can be minimized to a manageable level. In this study, the ability for conceptual complexity was hypothesized as a factor in managing this incongruence as well as the experiences of minority stress associated with developing an LG identity. In this manner, conceptual complexity was hypothesized to help lesbian and gay individuals achieve a positive sense of identity around their sexual minority status.

CHAPTER 3

METHODOLOGY

This chapter details the methodology used in this dissertation study. It consists of a description of data collection, procedures, sample characteristics, and instruments. The principal investigator was granted permission from the University of Texas at Austin Institutional Review Board (IRB) to conduct the proposed study (IRB Protocol # 2010-03-0091). This study was conducted in accordance with the University of Texas and American Psychological Association ethical standards to assure ethical treatment of all participants.

Procedures

Recruiting research participants belonging to groups where the individuals or their experiences are not validated by society can be problematic. Special methodological difficulties in research on gay and lesbian populations are well documented (Cochran, 2001; Solarz, 1999) and include difficulties assessing sexual orientation, problems sampling from a “hidden” population, and lack of appropriate comparison groups. For example, since self-identified lesbian women represent only 2 to 3% of the population, probability sampling would require a sample of 1,000 women to yield a sub-sample of 20 to 30 lesbian women (Solarz, 1999). Therefore, non-probability techniques are most often employed and were used in this study.

One established method of combating the challenges of recruiting such participants is termed 'snowball sampling.' Snowball sampling has been used in studies of sensitive subjects by employing individuals' social networks in order to access "hard to reach" populations (Browne, 2005). This method of recruitment allows researchers to "gain access to individuals living outside the boundaries of normative heterosexuality" (Browne, p.49). As such, snowball sampling was used to identify participants across a range of demographics. Although there were concerns as to whether or not snowball sampling would yield a representative sample, it was considered justifiable and acceptable to use in the current study due to the stigma and 'invisibility' attached to identifying as a stigmatized population (Barendgret, van der Poel, & van de Mheen, 2005). Furthermore, convenience techniques target hidden populations and make sampling more logistically possible; however, samples produced in this manner may be more representative of gays and lesbians who are 'out enough' to attend events, browse gay/lesbian themed websites, and join listserves. On the other hand, snowball techniques can potentially reach less 'out' individuals but produce samples biased toward being like the investigators, most frequently White, well-educated, middle-class, and between the ages of 25-40 (Hughes & Wilsnak, 1997). Combining sampling strategies has been recommended as a method of obtaining more broadly representative samples (Solarz, 1999).

Other studies report that, given the 'impossibility' of achieving a sample known to be representative of the LGBT community, the best that can be done is to simply achieve as large a sample as possible, drawn from as many sources as possible (Grossman and

Kerner, 1998). Research studies suggest that while 'representativeness' may be elusive to achieve, workable approximations may be possible and enhance the 'generalizability' of findings (e.g. Herek and Berrill, 1992). Sampling should strive to be diverse, and subjects ideally drawn from as wide a variety of sources as possible. This study made efforts to recruit a diverse and large sized baseline of participants implementing both convenience and snowball sampling. Zero stage nominees came from various gay and lesbian organizations (e.g., The Gay and Lesbian Community Center of Pittsburgh) and local events (L Style G Style events in Austin, TX). In addition, a link to the survey was placed on various gay and lesbian themed Facebook groups' homepages. Zero stage subjects were then asked to "pass along" the survey to 5-10 gay or lesbian individuals they knew via a link at the bottom of the online survey was also placed on the final page with the same request of "passing along" the survey to other LG individuals.

Participants were directed to a website that contained the survey for the study in two ways: either by utilizing a study email, wherein the investigator provided the link for the study, or through fliers, which contained the Internet website for the study. The first page of the website was an informed consent letter that outlined the voluntariness and anonymity of participation as well as the ability of the participant to cease participation at any time without penalty. Finally, since the study was anonymous, the informed consent letter was not a form for participants to fill out but simply a letter they read, and then certified they read before being able to move forward to the study itself. The final page of the study provided participants with a link to the study's webpage (homepage) and prompted them to send it to 5-10 friends.

Participants

A total of 272 participants participated in the study. Of those, 242 (87.7%) validly completed all study measures. Approximately 53% (142 participants) identified their sex as female; 130 (47%) identified as male. Ethnicity breakdown was as follows: 71% European/European American, 15% Hispanic/Hispanic American, 4% Black/African/African American, 3% Asian / Pacific Islander, 1% Native American, 1% Middle Eastern, and 5% Other. The age range was 18-70 with a median of 36 years (mean = 37.4 years). Highest level of Education obtained was as follows: 2% High School / GED, 20% Some College, 35% Associate's or Bachelor's Degree, and 43% Graduate Degree.

Measures

All participants were asked to complete the following instruments: a) Demographics Questionnaire; b) Lesbian and Gay Identity Scale (LGIS; Mohr & Fassinger, 2000) – Negative Identity Factor; c) Lesbian and Gay Salient Experiences Questionnaire (LGSE; developed for this study); and d) Paragraph Completion Test (PCT; Hunt & Dopyera, 1966).

Demographics Questionnaire

Participants were asked to provide the following information: age, sex, gender, relationship status, education, race, and ethnicity (See Appendix A).

Lesbian and Gay Identity Scale (LGIS; Mohr & Fassinger, 2000) – Negative Identity Factor

The Lesbian and Gay Identity Scale (LGIS) is a 27-item measure designed to assess six dimensions of lesbian and gay (LG) identity: *Internalized Homonegativity* (e.g., “I would rather be straight if I could”), *Need for Privacy* (e.g., “I prefer to keep my same-sex romantic relationships rather private”), *Need for Acceptance* (e.g., “I can’t feel comfortable knowing that others judge me negatively for my sexual orientation”), *Identity Confusion* (e.g., “I keep changing my mind about my sexual orientation”), *Difficult Process* (e.g., “Admitting to myself that I am an LG person has been a very slow process”), and *Superiority* (e.g., “Straight people have boring lives compared with LG people”) (Mohr & Fassinger, 2000).

The LGIS was designed to incorporate dimensions of lesbian and gay identity discussed in both the clinical and theoretical literature (Mohr & Fassinger, 2003). A diverse sample of almost 1,000 gay men and lesbian women participated in the exploratory factor analyses and confirmatory factor analyses used to derive the final 27 items on the scale. In addition, a second-order factor analysis suggested that four of the six subscales loaded on a single, second-order factor, which they termed “Negative Identity.” The Negative Identity Factor is comprised of four of the six subscales of the LGIS (Internalized Homonegativity, Need for Privacy, Need for Acceptance, and Difficult Process). The Negative Identity Factor was the outcome measure utilized in this study.

The range of scores for the Negative Identity Factor is 7-147. Higher scores indicate greater levels of Negative Identity. Each item is rated on a 1-7 Likert Scale with a range of responses from “Disagree Strongly” to “Agree Strongly.” The mean total score

for the LGIS obtained in this study was 61.65, with a standard deviation of 19.6. The internal consistency reliability coefficient was .90 for the current sample.

Lesbian and Gay Salient Experiences Questionnaire (LGSE)

Following a review of the literature, it was concluded that few instruments existed that measured the management of a sexual minority identity and the interactions or experiences related to identifying as a member of this population. Therefore, in order to measure these experiences related to one's sexuality, an instrument was created for specific use in this study. The instrument was originally comprised of four subscales: (1) *Heightened Awareness* – this scale attempted to capture experiences that might lack overt malice or prejudice, but are still salient in that they potentially kindle thoughts about the significance of one's sexuality and identity (e.g., “how often have you been in a situation where you became aware of being the only non-heterosexual person in a social situation?”); (2) *Negative Affect* – this scale attempted to capture the emotional responses associated with perceived experiences of discrimination towards the individual both directly (e.g., “how often have you felt hurt or sad about something said to you that felt discriminatory?”), and in a broader context (e.g., “how angry or upset to do you feel about mainstream society's acceptance of gays and lesbians?”); (3) *Victimization* – this scale attempted to measure the extent to which an individual has encountered direct prejudice and/or discrimination (e.g., “how often have you been called a derogatory name (dyke, fag, etc) relating to your sexuality?”); and (4) *Family of Origin* – this scale related

to familial attitudes and level of acceptance (e.g., “how would you describe the messages you received growing up about lesbian and gay individuals?”). For all subscales, the higher the score, the greater the amount of salient, or meaningful experiences encountered related to identifying as a sexual minority.

Creating this instrument was a multi-step process. Following a review of current racial and other minority stress questionnaires, none seemed to capture the specific types of difficulties LG individuals face within society and within themselves. Conceptually, it is logical to presume that all marginalized groups share certain commonalities; however, because being a lesbian woman or a gay man is such an internally defined identity, and one that in some ways may be ‘invisible’ to others, the parallels between sexual minorities and say, racial minorities, has limitations. None of the minority stress measures in the current literature truly captured some of the nuances that come with being a lesbian woman or a gay man. Therefore, it was decided to create a measure that would attempt to capture some of the more obvious (e.g., direct victimization) aspects of identifying as a minority population, but also some of the more tacit and subtle experiences that come from identifying as an LG individual – for example, being aware that others presume you are heterosexual, yet you are not. How does this ‘hiding’ or ‘passing’ impact LG individuals?

Paragraph Completion Test (PCT; Hunt & Dopyera, 1966)

The Paragraph Completion Test (PCT) is an instrument specifically designed to measure conceptual complexity. Conceptual complexity is defined and measured in terms of both evaluative differentiation and conceptual integration. Evaluative

differentiation refers to the perception of alternative interpretations a person considers when analyzing an event or issue (Coren & Suedfeld, 1995). Low differentiation implies lack of awareness of alternative ways of looking at an issue and reliance on rigid, dichotomous decision rules. For instance, an individual might take an undifferentiated view of a conflicting situation by focusing on only one major theme (e.g., it is always better to listen to everyone). A more differentiated statement would recognize the difficulty in capturing the complexity of a situation with a single prescription (e.g., sometimes it is better to listen, but other times it might be better to act). Differentiation is a necessary but insufficient prerequisite for conceptual integration. Here, integration refers to the development of complex connections among differentiated characteristics (Suedfeld, Tetlock, & Streufert, 1992). The complexity of integration depends on whether the person perceives the differentiated characteristics as existing in isolation (low integration), in simple interactions (moderate integration), or in multiple, contingent patterns (high integration). For example, statements reflecting moderate integration might specify how two goals cannot be maximized simultaneously and outline the trade-offs necessary to reach a resolution (e.g., there are important trade-offs between listening and doing that need to be taken into account. One way to compromise is to designate that in the beginning of a process it is better to listen to everyone, but at a certain point it becomes more important to get work done).

In adherence to administrative standards, participants were provided two stems and two open-ended questions, were they were asked to “complete the following statement with at least 4-6 sentences.” Assessment of cognitive complexity occurred on a

7-point scale. Scoring was based on structure rather than quality of style, grammar, and content of response. A score of 1 is assigned for paragraphs with neither differentiation or integration, 3 for a paragraph that is fully differentiated but not integrated, 5 for a paragraph that is fully differentiated and integrated, and 7 for a paragraph that exhibits higher-order integration. Scores of 2, 4, and 6 are considered transitional scores and given when paragraphs approach but do not fully attain the full score. For more detailed information see Baker-Brown et al., 1992. Mean conceptual complexity scores across all four items were utilized in analyses.

Inter-rater reliability was assessed on coding of responses. Thirty percent of responses were double coded and analyzed for inter-rater reliability by computing Cohen's kappa coefficient. Cohen's kappa's can range from -1 to 1, with higher numbers indicating greater agreement; a kappa of .7 or above was the target level proposed between the two coders. This minimum criterion was achieved (Cohen's kappa = .76).

CHAPTER FOUR

RESULTS

Sex Differences

Possible sex differences in reported levels of negative lesbian and gay identity as measured by the Lesbian and Gay Identity Scale – Negative Identity Factor were examined. Results of a one-way ANOVA was statistically significant [$F(1, 274) = 22.0, p < .001$], with men reporting higher levels of negative identity (LGIS – Negative Identity Factor) than women. Mean scores and standard deviations were as follows: Men ($M = 66.7, SD = 19.6$), and Women ($M = 57.3, SD = 18.6$).

Sex differences in reported amounts of salient experiences related to identifying as a sexual minority as measured by the Lesbian and Gay Salient Experiences Questionnaire (LGSE) were also examined using one-way ANOVAs. Statistically significant sex differences were obtained in the total score for the LGSE as well as for four of the five subscales. In all instances, men reported higher levels of salient experiences. Results are summarized in Table 1.

Table 1.

Sex Differences in Salient Experiences (LGSE)

Scale	Mean-Male	Mean-Female	<i>F</i> (1,274)	Sig. (<i>p</i>)
Heightened Awareness	9.4	8.7	8.4	<.001
Negative Affect	11.1	9.4	13.6	< .001
Victimization	13.4	11.4	17.4	< .001
Family of Origin	15.4	13.8	8.9	< .01
Societal Acceptance	7.1	6.7	9.1	.07
LGSE Total	49.4	43.4	17.9	< .001

A comparison of scores on the conceptual complexity task, measured by the Paragraph Completion Test (PCT), revealed slightly higher levels of conceptual complexity in women when compared to men (mean scores of 1.87 and 1.75 respectively). However, ANOVA analysis indicated that this difference was not statistically significant [$F(1, 240) = 2.3, p = .133$].

RESEARCH QUESTION #1: *Is there a relationship between salient experiences related to one's sexual minority status (measured by the LGSE), and negative sexual minority identity (measured by LGIS – Negative Identity Factor)?*

It was hypothesized that higher levels of salient experiences related to one's sexual minority status as measured by each subscale of the LGSE (Heightened Awareness, Negative Affect, Victimization, Family of Origin, and Societal Acceptance) would be associated with greater levels of negative sexual minority identity (as measured by the LGIS – Negative Identity Factor).

A multiple regression analysis was conducted; scores for each subscale of salient experiences related to identifying as sexual minority (LGSE subscales) were used to predict levels of negative lesbian and gay identity as measured by the LGIS – Negative Identity Factor. The regression analyses revealed an R^2 value of .276 ($F[5, 270] = 20.6, p < .001$), with salient experiences accounting for 27.6% of the variance in reported levels of negative identity for the sample as a whole. In addition, the relationship between three of the five types of salient experiences (LGSE sub-scales) and negative identity (LGIS – Negative Identity Factor) were statistically significant. Results are summarized in Table 2.

Table 2.

Regression Results for Salient Experiences (LGSE Subscales) on Negative Identity (LGIS – Negative Factor)

Variable	B	SEB	β	t	Sig. (p)
Heightened Awareness	10.8*	1.67	.377	6.53	<.001

Family of Origin	5.25*	1.29	.255	4.81	<.001
Negative Affect	4.33*	1.79	.170	2.42	<.05
Victimization	-3.63	2.22	-.133	-1.63	.10
Societal Acceptance	.23	1.25	.010	0.19	.85

Note. *significant result

Because statistically significant sex differences were obtained on reported levels of salient experiences related to one's minority sexual status (measured by the LGSE) and negative identity (LGIS – Negative Identity Factor), the relationship between the two factors was explored separately for men and women. For women, salient experiences accounted for 16.7% ($R^2 = .167$, $F[5,139] = 7.92$, $p < .001$) of the variance in negative identity; for men, it was twice as high at 36.8% ($R^2 = .368$, $F[5,123] = 20.34$, $p < .001$). Additionally, to examine if the relationship between the variables for men and women were statistically different from one another, the two correlation coefficients (.167 and .368) were compared using a Fisher r-to-z transformation. Results indicated that the difference between the coefficients for men and women was statistically significant ($Z = 2.21$, $p = .02$, two-tailed). Salient experiences related more powerfully to negative identity for men than women.

Experiences of heightened awareness of one's sexuality, or sense of feeling “different,” (LGSE – Heightened Awareness subscale) were significantly related to negative identity (LGIS – Negative Identity Factor) for both men and women. For men, however, this relationship was dramatically stronger. The impact of one's family of origin's attitudes about homosexuality (LGSE – Family of Origin subscale) on negative

minority sexual identity (LGIS – Negative Identity Factor) was also statistically significant for both men and women; the relationship was again stronger for men. The relationship between emotional reactions to salient experiences related to one’s sexuality (LGSE – Negative Affect subscale) and negative identity (LGIS – Negative Identity Factor) was statistically significant for women, but not men. Results are summarized in Table 3.

Table 3.

Sex Differences in the Relationship Between Salient Experiences (LGSE subscales) and Negative Identity (LGIS)

Variable	B	SEB	β	<i>t</i>	Sig. (<i>p</i>)
Heightened Awareness - <i>Men</i>	14.5*	2.44	.515	5.92	<.001
Heightened Awareness - <i>Women</i>	7.9*	2.31	.277	3.43	<.001
Family of Origin - <i>Men</i>	6.5*	2.02	.199	2.59	<.001
Family of Origin - <i>Women</i>	5.2*	1.75	.253	2.97	<.01
Negative Affect - <i>Men</i>	1.4	2.59	.109	1.09	.59
Negative Affect - <i>Women</i>	5.5*	2.49	.168	1.71	.01
Victimization - <i>Men</i>	-4.3	2.81	-.146	-1.52	.13
Victimization - <i>Women</i>	-4.7	3.61	-.129	-1.23	.19
Societal Acceptance - <i>Men</i>	.06	1.63	.003	.035	.97
Societal Acceptance - <i>Women</i>	-.60	1.99	-.024	-.303	.76

Note. *significant result

RESEARCH QUESTION #2: *Is there a relationship between conceptual complexity (measured by the Paragraph Completion Test) and negative sexual minority identity (measured by LGIS – Negative Identity Factor)?*

It was hypothesized that higher levels of conceptual complexity would be associated with lower levels of negative identity. A two-tailed Pearson correlation analysis was conducted between mean scores on the Paragraph Completion Test (PCT; measuring conceptual complexity) and total score on the Lesbian and Gay Identity Scale – Negative Identity Factor (LGIS; measuring negative identity). Results indicated that conceptual complexity was not significantly related to negative identity [$r = -.046$, $p = .479$]. Separate Pearson correlations were calculated for men [$r = .024$, $p = .804$] and for women [$r = -.061$, $p = .487$]. The relationship between conceptual complexity and negative identity was not statistically significant for either men or women. A more detailed look at possible reasons for the lack of results despite sound theoretical rationale for the existence of a relationship between conceptual complexity and negative identity suggested a restricted range of scores on the paragraph completion test. The score range in this sample was 1 – 3.5; however, the full score range for the scale is 1 – 7.

RESEARCH QUESTION #3: *Is there a moderating or interactive effect of salient experiences related to one's sexual minority status (measured by the LGSE) and conceptual complexity (measured by the PCT) on negative identity (LGIS – Negative Identity Factor) such that levels of conceptual complexity affect the strength of the relationship between salient experiences and negative identity?*

It was hypothesized that higher levels of conceptual complexity would weaken the relationship between salient experiences related to one's sexuality (LGSE) and negative identity (LGIS – Negative Identity Factor). A regression analysis using conceptual complexity (PCT) as a moderator for the relationship between salient

experiences and negative identity were individually conducted for each subscale of the salient experiences instrument (LGSE). A change in R^2 values was then examined. None of the results were statistically significant: Heightened Awareness [$F(1,238) = 3.14$, $\Delta R^2 = .01$, $p = .08$], Negative Affect [$F(1,238) = .17$, $\Delta R^2 = .001$, $p = .68$], Victimization [$F(1,238) = .708$, $\Delta R^2 = .003$, $p = .40$], Family of Origin [$F(1,238) = 3.07$, $\Delta R^2 = .012$, $p = .08$], and Societal Acceptance [$F(1,238) = .376$, $\Delta R^2 = .002$, $p = .54$].

Because statistically significant sex differences were found on both the salient experiences measure (LGSE) and the negative identity measure (LGIS – Negative Identity Factor), separate moderation analyses were conducted for men and women. For women, conceptual complexity did not alter the impact salient experiences had on negative identity (see Table 7). For men, the moderation analysis was statistically significant for the LGSE - Family of Origin subscale (see Table 8). Despite this one statistically significant finding, this analysis was also likely impacted by the limited variance of scores on the conceptual complexity measure (Paragraph Completion Test).

Table 4.

Moderation Effects for Women; the Impact of Conceptual Complexity (PCT) on the Relationship Between Salient Experiences (LGSE) and Negative Identity (LGIS – Negative Identity Factor).

Variable	F(1,128)	ΔR^2	Sig. (p)
Heightened Awareness	.147	.001	.70
Negative Affect	.021	.000	.89
Victimization	.123	.001	.65

Family of Origin	.001	.000	.96
Societal Acceptance	.140	.001	.71

Table 8.

Moderation Effects for Men; the Impact of Conceptual Complexity (PCT) on the Relationship Between Salient Experiences (LGSE) and Negative Identity (LGIS – Negative Identity Factor).

Variable	F(1,104)	ΔR^2	Sig. (<i>p</i>)
Heightened Awareness	1.28	.007	.26
Negative Affect	.34	.003	.56
Victimization	1.44	.013	.23
Family of Origin	5.67	.046*	.02
Societal Acceptance	2.26	.020	.14

Note. *significant result

RESEARCH QUESTION #4: *What are the psychometric properties of the measure created for this study that was used to examine salient experiences (LGSE)?*

Scores for the salient experiences measure (LGSE) were calculated on a Likert scale from 1(never) to 5(very often). Score ranges for each subscale were as follows: Heightened Awareness = 4-20; Negative Affect = 6-30; Victimization = 7-35; and Family of Origin =

5-25. Total score on the measure had a range of 22-110. Factor Analysis (orthogonal rotation) was conducted on the questionnaire in order to validate scale construction (see Table 6). Factor loadings revealed five factors. Consistent with the design and intent of this measure, three of the four scales each loaded as a unique factor. The Negative Affect scale, however, was split into two factors. Two questions on this scale (NA5 and NA6) formed their own, distinct factor. These two questions related to an individual's emotional reactions to perceived levels of acceptance, and societal treatment of lesbian women and gay men. In contrast, the other questions within the subscale dealt with emotional reactions to direct, or more personalized, experiences of discrimination. As a result, a fifth sub-scale was added to the LGSE measure – this scale was subsequently labeled “Societal Acceptance.” Therefore, NA5 and NA6 were changed to SA1 and SA2. These results are summarized in Table 1. Cronbach's alphas, means, and standard deviations were calculated for each scale and are listed in Table 7. Internal reliability coefficients were strong for all scales with the exception of the Heightened Awareness subscale. Due to the exploratory nature of this study, this scale was included in analyses. However, the lack of stringent internal reliability implies that results using this scale should be interpreted with caution. A correlation matrix of all subscales was also examined (see Table 8).

Table 6.

Exploratory Factor Analysis - Factor Loadings for LGSE

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
HA1: Others assumed you were heterosexual	.062	-.028	.156	.515	-.245
HA2: People called attention to your sexuality	.242	.185	-.133	.622	.342
HA3: Awareness of being only non-hetero in social situation	.154	.156	.151	.835	.082
HA4: Felt awkward of uncomfortable because of sexuality	.306	.246	.252	.621	.283
NA1: Angry or upset over something said to you	.829	.181	.269	.246	.305
NA2: Angry or upset over something done to you	.842	.220	.185	.147	.408
NA3: Hurt or sad over something said to you	.879	.119	.193	.302	.313
NA4: Hurt or sad over something done to you	.884	.163	.194	.243	.386
SA1: Angry or upset over mainstream society's acceptance	.223	.117	.875	.170	.114
SA2: Hurt or sad over mainstream society's acceptance	.326	.114	.867	.161	.166
VIC1: Target of direct prejudice or overt discrimination	.397	.230	.014	.191	.586
VIC2: Called a derogatory name (fag, etc.)	.347	.253	-.141	.235	.620
VIC3: Been made fun of, picked on, hit, etc.	.379	.217	-.041	.192	.663
VIC4: Taken drastic action to deal with something discriminatory	.383	.073	-.060	.010	.738
VIC5: Treated unfairly by people in service jobs	.335	.284	.138	.148	.773
VIC6: Treated unfairly by people in helping jobs	.388	.296	.163	.110	.773
VIC7: Treated unfairly by institutions	.403	.115	.034	.214	.691
FAM1: Growing up, parents spoke unfavorably	.258	.824	.068	.220	.185
FAM2: Growing up, received negative messages	.337	.736	.071	.203	.199
FAM3: Growing up, received positive messages	-.005	.609	.153	.126	.104
FAM4: Parents' acceptance when you first came out	.057	.777	.046	-.007	.135
FAM5: Parents' acceptance now	.136	.741	.065	.096	.203

**Note.* For complete wording for each item please refer to the Appendix Section. HA = Heightened Awareness; NA = Negative Affect; VIC = Victimization; FAM = Family of Origin.

Table 7.

Internal Reliability, Mean, and Standard Deviation of LGSE

Scale	Cronbach's Alpha	Mean	SD
Heightened Awareness	.625*	9.1	2.0
Negative Affect	.905	10.4	3.1
Victimization	.858	12.3	4.3
Family of Origin	.795	14.6	4.2
Societal Acceptance	.886	6.9	1.7
Total Scale	.856	46.4	9.9

Note. *Initial coefficient was .567. An item analysis was conducted and results indicated that with the deletion of HA1, it raised the reliability coefficient to .625. This item was subsequently deleted from the scale's total score in order to include the subscale in this study.

Table 8.

Correlation Matrix – LGSE Subscales

	HA_Mean	NA_Mean	VIC_Mean	FAM_Mean	SA_Mean
HA_Mean	1.00	.369**	.370**	.261**	.422**

NA_Mean	1.00	.631**	.231**	.368**
VIC_Mean		1.00	.299**	.229**
FAM_Mean			1.00	.333**
SA_Mean				1.00

Note. **Correlation is significant at the .01 level (2-tailed)

Post Hoc Analyses

Due to the restricted range of scores on the conceptual complexity measure (PCT), a median split was utilized to divide the sample into two groups: Complex Thinkers and Simple Thinkers. An independent samples t-test comparing levels of negative identity (LGIS – Negative Identity Factor) between Complex Thinkers and Simple Thinkers was statistically significant [$t(244) = 4.2, p < .001$] with Complex Thinkers reporting lower levels of negative identity than Simple Thinkers. Results are summarized in Table 9. Separate independent samples t-tests comparing Complex Thinkers and Simple Thinkers on their reported levels of negative identity were also conducted for each sex. Results were statistically significant for both men [$t(108) = 2.25, p < .05$] and women [$t(132) = 2.98, p < .01$]. Results are summarized in Table 10.

Table 9.

Negative Sexual Minority Identity Scores (LGIS – Negative Identity Factor) for Complex Thinkers and Simple Thinkers (Full Sample)

Group	<i>M</i>	<i>SD</i>
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Complex Thinkers	56.3	16.6
Simple Thinkers	66.2	20.7

Table 10.

Negative Sexual Minority Identity Scores (LGIS – Negative Identity Factor) for Complex Thinkers and Simple Thinkers by Sex

Group	<i>M</i>	<i>SD</i>
Male Complex Thinkers	61.8	16.9
Male Simple Thinkers	70.0	19.8
Female Complex Thinkers	52.8	15.8
Female Simple Thinkers	62.4	20.9

To examine potential differences between Complex Thinkers and Simple Thinkers on reported levels of salient experiences related to identifying as a sexual minority (LGSE), an independent samples t-test was conducted. Results were non-significant [$t(244) = -.84, p = .40$]; in fact, Complex Thinkers ($M = 46.9, SD = 9.8$) and Simple Thinkers ($M = 45.8, SD = 9.9$) reported nearly identical amounts of salient experiences as measured by the LGSE. A comparison of means between Complex Thinkers and Simple Thinkers for each sex were consistent with the findings for the sample as a whole. The difference between reported amounts of salient experiences for

Complex Thinkers and Simple Thinkers was non-significant for both men [$t(108) = -.90$, $p = .37$] and women [$t(132) = -.85$, $p = .40$].

CHAPTER FIVE

DISCUSSION

The interest in the current study was multi-layered. The first intention was to examine the relationship between salient experiences related to identifying as a sexual minority for lesbian women and gay men. Internalization of anti lesbian and gay prejudice has been termed “the most insidious” form of minority stress for lesbians and gays (Meyer & Dean, 1998, p. 161). Most models of sexual minority development (e.g., Cass, 1979; McCarn & Fassinger, 1996) suggest that due to these experiences of prejudice and social oppression lesbian and gay individuals follow a unique developmental trajectory (Potoczniak, Aldea, & DeBlaere, 2007). In line with recent research trends, a secondary aim of this study was to explore some of the possible factors that promote or impede the successful integration of a lesbian or gay identity. More specifically, while individuals undoubtedly encounter varying degrees of prejudice or oppression, it is likely that certain factors mitigate how these experiences are evaluated. A driving force behind this study was a curiosity around how these evaluations, interpretations and internalizations impacted one’s relationship with their lesbian or gay identity.

Cognitive models of appraisal treat stress as a psychological state expressed as an internal representation of a particular and problematic transaction between a person and their environment (Holroyd & Lazarus, 1982). Similarly, Meyer (1995) argued that identifying as a member of any minority population creates experiences that bring to light the “juxtaposition of minority and dominant values and the resultant conflict with the social environment” (p.39). Lazarus & Folkman (1984) surmised that this type of conflict between a person and his or her environment is the vortex of all social stress. This study aimed to investigate some of the ways in which one’s cognitive style might influence these everyday experiences which stem from identifying as a lesbian woman or gay men within a hetero-normative culture and society.

Cognitive approaches to information processing was identified as one of the likely innumerable variables that contribute to how experiences related to identifying as a minority population impact how one understands what it means to identify as a member of that particular minority population. Frequently, although a group of individuals may share similar experiences, those experiences do not necessarily engender the same effect in all who encountered it. An individual’s interpretive process plays a role in determining the personal significance and relevance of any event or experience, particularly when the event or experience arouses affective stress or cognitive conflict. It is on the basis of this argument that the question was raised as to whether cognitive factors may affect sexual minority identity development, either directly, or in concert with salient experiences related to one’s sexuality.

Conceptual Complexity, the capacity and willingness to acknowledge the legitimacy of competing perspectives on the same issue (differentiation) and to forge conceptual links among those perspectives (integration), is a form of cognitive style and important variable in Conceptual Systems Theory (Harvey, Hunt, & Schroder, 1961), Conceptual Complexity was investigated as a factor that potentially interacts with salient experiences related to identifying as a sexual minority in influencing lesbian and gay identity development. Frequently, minority-related experiences present discrepant and inconsistent information of which individuals must make sense of in order to arrive at a congruent understanding of what the experience means, and also how it impacts their sense of self (Meyer, 1995). Theoretically, conceptual complexity should allow individuals to negotiate this type of conflict with more ease.

Results for this sample of lesbian women and gay men, revealed a relationship between salient experiences that result from identifying as homosexual and an individual's lesbian and gay identity development. Individuals who reported a higher degree of overall sexual minority-related salient experiences also expressed increased difficulties with their identity as a lesbian woman or gay man. Furthermore, this relationship was stronger for men than women. The particular type of salient experience also influenced the degree to which an individual's sexual minority identity was negatively impacted. Some of these effects also differed based on sex. For example, for gay men, experiences where they feel somehow "different" than others because of their sexuality have a very strong (negative) impact on their sexual identity. In contrast, emotional responses to salient experiences related to one's sexuality do not effect gay

men's negative identity, but they do impact lesbian women's sexual minority identity negatively.

An individual's ability to synthesize and integrate discrepant and/or ambiguous information (conceptual complexity) did not yield a significant impact on one's sexual minority identity. However, an examination of the data suggested a restricted range in scores. As such, post-hoc analyses utilized a median split to create two groups (Complex Thinkers and Simple Thinkers) and re-examined the relationship between conceptual complexity and lesbian/gay identity development. Results indicated that Complex Thinkers reported significantly lower levels of negative sexual minority identity as compared to Simple Thinkers. This result was consistent for both men and women. Hence, an individual's capacity to tolerate ambiguity and view experiences from multiple perspectives may serve as a protective factor against developing negative feelings towards oneself as a gay man or lesbian women. As counseling psychologists, one potential way to help clients develop a positive sense of self as a member of the gay and lesbian population might be to help bolster clients' capacity to avoid dichotomous thinking (e.g., right/wrong) and integrate multiple perspectives when processing experiences.

Minority Stress Experiences and Negative Identity

Whether directly experienced or indirectly observed, experiences of prejudice and discrimination are widely known to impact minority populations' sense of self (Uba, 1994; Atkinson, Morten, & Sue, 1995). Results of this study mirrored these findings. However, the relationship between these experiences and minority sexual identity

development was much stronger for men than for women. Recent research trends are leaning further and further towards attempting to develop separate sexual minority development models for men and women (Hequembourg & Brallier, 2009). In their study, Hequembourg & Brallier (2009) found that the strain and anxiety experienced by gay men and lesbian women as a result of their nonconformity to heteronormative expectations differed based on gender. For example, lesbian women reported that the eroticized nature of female same-sex relationships and their presumed “availability” for heterosexual encounters was stress and anxiety provoking. In contrast, gay men reported particularly harsh retributions for their homosexuality, particularly in adolescence; in addition, the threat of violence due to one identifying as a homosexual was reportedly higher for men than for women. There is also evidence that gay men become aware of their non-heteronormative sexuality earlier than women (Diamond, 2007). The findings of this study support the notion that the path and factors contributing towards developing a minority sexual identity for men and women are quite different. In particular, experiences related to one’s sexuality whether overt or more subtle and seemingly innocuous, impact men’s sexual identity in a much stronger and negative way than those experiences effect women’s identity related to their sexuality. Thus, there appear to be other factors which were not identified in this study that contribute to lesbian women developing negative attitudes towards their sexuality.

Nonetheless, the impact salient experiences had on identity development differed based on the type of experience. Interestingly, results of this study suggest that the category of experience which impacts one’s identity negatively the most are times when

an individual becomes aware of their “different” sexuality or the incongruence of others’ perceptions and the truth of who one is (“heightened awareness”). Therefore, even if experiences lack the overt malice or prejudice one generally thinks of in regards to minority stress, those experiences are still quite salient for lesbian women and gay men. Moreover, while both men and women are affected by these experiences, the negative impact they impose on men’s identity is particularly powerful. This suggests that gay men are quite vulnerable to feeling “different” from others and that these experiences kindle negative thoughts and attitudes about the significance of their sexuality and identity. However, the exact mechanism through which these types of awareness experiences impact negative identity is difficult to surmise. One potential pathway suggested by Major & O’Brien (2005) is that individuals who are particularly vigilant for signs of danger and rejection often communicate those expectations to others in various verbal and nonverbal ways, which ironically creates the very rejection they fear. Although the present study did not demonstrate a direct link between heightened awareness and expectations of rejection, it is possible that the two are related. In addition, past research suggests that gay men experience higher rates of sexual victimization (Blasam et al., 2005) and hate crimes (Herek, 2009) than sexual minority women. Results of the present study also yielded significantly higher rates of victimization experiences for men compared to women. Thus, the heightened degree of vigilance (“awareness”) men display and its strong link to negative identity may be due to a degree of “healthy paranoia” on their part to avoid potential danger. Alternatively, past research suggests that sexual minority women are more likely to adopt a bisexual identity or heterosexual

identity at some point in their development (Diamond 2007). Thus, perhaps lesbian women are less vulnerable to feeling like “fish out of water” because they at one point or another identified with heteronormative culture. Additionally, there tends to be more permissive social norms in regards to minority sexuality for women than for men (Austin et al, 2004). Thus, it is likely easier for women to feel accepted and less self-conscious regarding their sexual orientation when compared to men.

The attitudes an individual’s family communicates towards homosexuality as well as the level of acceptance perceived by a gay man or lesbian woman from their families also affects individuals’ identity formation. The more negativity and rejection is perceived, the more those individuals expressed difficulties in regards to their sexual identity. This was equally true for both men and women. It is also important to note that there is evidence that it is not only what parents and families actually say, but also what they *don’t say*. Lesbian women and gay men tend to express some degree of emotional pain related to indirectly experiencing feelings of rejection or disapproval from family members (Rostosky et al., 2007) even when those experiences are not overt.

Results indicate that affective arousal (feelings of anger, sadness, etc.) in reaction to minority stress experiences is related to women’s sexual identity, but not men’s. This can be interpreted in a variety of ways. Perhaps when compared to men, women tend to engage their emotional responses as salient information when understanding and evaluating themselves. Alternatively, women may be more comfortable expressing their emotions due to cultural socialization and thus able to access an awareness of them on

surveys such as this. It is difficult to draw definitive conclusions based on this one piece of data. The results are nonetheless notable and would benefit from further exploration.

Surprisingly, direct experiences of victimization failed to yield a significant relationship to one's sexual identity. However, the Victimization scale was also observed to low variability of responses that likely contributed to the lack of results.

Taken together, the results above indicate that even when gay men and lesbian women are not experiencing overt or direct acts of prejudice or discrimination, the more subtle and tacit experiences related to identifying as a lesbian woman or gay man appear to be quite damaging to an individual's identity development. This is of clinical significance in that lack of overt victimization experiences does not necessarily imply that an individual is not experiencing significant stress related to their sexuality. In other words, although a lesbian or gay client may not report obvious experiences of discrimination or prejudice, it is important to consider that internal processes such as a sense of awareness of being "different" or the incongruence between how others perceive the individual (i.e., assuming their heterosexuality) impact that individual's sense of self and their identity. Meyer (2003) argued that lesbian women and gay men learn to expect and anticipate negative reactions from heterosexuals and must therefore be "on guard" and maintain vigilance. This is especially true for male clients.

Furthermore, the data suggests that attitudes and messages communicated by one's family during childhood continue to leave an indelible mark on identity development well into adulthood. Many subjects reported that when they first "came out" to their parents, their parents' reaction was generally negative. When asked about their

parents' current attitudes, many of those same subjects indicated much more acceptance. While this is encouraging, it is important to consider that even a parent's initial rejection, despite later acceptance, impacts how gay men and lesbian women view themselves. There appears to be something fundamental about a parent's first response to their child "coming out" to them, regardless if they eventually communicate a greater degree of acceptance. This finding is in line with previously reported findings of the link between lack of familial support and depression, anxiety, and suicidality; lesbian and gay individuals who reported a lack of social support from their families reported significantly more depressive and anxiety symptoms as well as suicidality than individuals who felt that their families were supportive (Ploderl & Fartacek, 2005). Thus, the importance of a lesbian or gay individual's family communicating supportive attitudes should not be underscored.

Conceptual Complexity and Negative Identity

There are undoubtedly countless factors that serve to facilitate or impede the development of one's lesbian or gay identity. Moreover, one of the substantial gaps in the research regarding minority stress experiences' impact on lesbian women and gay men, are models to potentially explicate the general psychological processes through which these stressors impact psychological functioning (Hatzenbuecher, 2009). Despite direct empirical evidence of this sort, theoretically, one can presume that some of these factors are external, with experience (as discussed above) being the most obvious example. Other factors are likely more internal. One such factor explored in this study is cognitive style. The process of acquiring a lesbian or gay identity can be re-framed as a process of

enduring conflict – initially the conflict is internal as one grapples with the possibility that he or she may be lesbian or gay; later, the conflict shifts to one between oneself and mainstream society. Conceptual complexity allows individuals to, among other things, tolerate conflict and ambiguity. Therefore, it was hypothesized that at higher levels, conceptual complexity would buttress an individual against developing a negatively toned identity. Initial analysis of the data did not support this hypothesis.

However, scores on the measure of conceptual complexity yielded limited variability in responses with the highest average score being 3.5 on a scale that runs 1-7. In general, this study sample yielded low (less complex) scores. Possible explanations for this are outlined in the limitations section. In response, as a proposed alternative, scores on the conceptual complexity measure were divided into two groups using a median split (Complex Thinkers and Simple Thinkers). Here, results did yield significant findings in the predicted direction as the group of individuals with relatively higher levels of conceptual complexity (Complex Thinkers) endorsed lower levels of negative sexual identity. Therefore, this suggests the existence of a relationship between conceptual complexity and identity development; however, some of the limitations of this study (see below) made it difficult for this relationship to emerge when the variable was utilized in its continuous form.

The relationship between the degree of conceptual complexity and identity development is theoretically consistent with models of lesbian and gay identity development. Across minority sexual identity development theories (e.g., Cass Model, McCarn & Fassinger Model), as an individual's identity evolves, continual differentiation

and integration takes place as one negotiates what elements from the dominant culture can be trusted or are still applicable to them, and what should be questioned, challenged, or disavowed. Simultaneously, through the identity development process, individuals must negotiate some level of discrepancy between their public and private identity. Conceptually, and as was suggested by the data, an individual's level of conceptual complexity plays a role in the ease with which an individual is able to go through the identity development process without it having a detrimental effect on their identity as a gay man or lesbian woman. As a cognitive variable relating to identity development and to psychological functioning in lesbian and gay individuals, conceptual complexity appears to contribute to some degree and can be added to the growing list of other important cognitive variables already established in the literature such as rumination (Hatzenbeuer et al., 2011) and cognitive appraisal models (Safren & Heimberg, 1999).

Conceptual Complexity as a Moderator Between Minority Stress Experiences and Identity Development

Cognitive style allows individuals to mediate the process between stimulus and response and is the manner in which individuals automatically or unconsciously process information. Cognitive style is also comprised of the tacit assumptions, beliefs, commitments, and meanings that influence habitual ways of construing oneself and the world (Markus & Smith, 1981). Under experiences of stress, cognitive structures can act as templates that influence the way in which situations are appraised and guide cognitive-affective processes and coping behaviors (Beck, 1984). As such, it was hypothesized that conceptual complexity, an aspect of cognitive style, would influence the impact salient

experiences had on an individual's identity. Results from this sample did not yield a significant finding for women in any category of salient experiences. For men, however, conceptual complexity emerged as a moderator between experiences related to one's family of origin and their impact of negative identity. It is possible that cultural gender norms may contribute to this finding. Specifically, the image of a young, "tomboy" girl is considered socially acceptable and within normative cultural standards. In contrast, a more "feminine" boy (i.e., "sissy") is often demeaned and considered unacceptable. Furthermore, these are the adolescents who are frequently called "fag" in the playground, regardless of whether or not they identify as homosexual. Therefore, it is possible that for certain gay men, particularly if they display non-traditional gender normed behaviors during childhood or adolescence, the attitude and level of acceptance communicated by their families has a strong hold over their self-identity and internalized views of themselves. However, if these same men are able to interpret the discrepancies between themselves and societal or familial expectations in a flexible and less self-critical manner, their identity as a gay man will be less negatively impacted by those experiences.

Limitations

Although the present study adds to the growing literature on the process of acquiring a lesbian or gay identity as well as the factors influencing that process, a number of significant and important limitations warrant mention. First, the method of data collection, the Internet, holds a number of potential problems. While convenient and useful in effectively reaching "hidden" populations such as gay men and lesbians, all the information gathered relies on the integrity of participants to self-identify their sexuality

and more importantly, answer all questions openly and honestly. As with any self-report measure, the possibility of bias and/or more unconscious processes such as defense mechanisms which might limit an individual's ability to view or report their thoughts, feelings, and difficulties honestly, merits consideration. Furthermore, it is possible that the use of the Internet contributed to the constricted range of responses on the Paragraph Completion Test (PCT). Perhaps asking individuals to take the time to think about and write about issues that may seem irrelevant to them is not realistic. Particularly when the Internet is typically very fast-paced and we are accustomed to simply "clicking-through" rather than writing a series of sentences. Participants' motivation to do this was likely low and may be responsible for the restricted range of scores on the PCT. Perhaps using an objective questionnaire such as one that measures tolerance for ambiguity or conflict resolution style (variables related to conceptual complexity) may have been more effective and yielded stronger results.

A second impediment to ease of interpretation is that the study was not an experimental design; nor likely, was the sample random. In part, this is a practical reality – gay men and lesbian women are a specific, small, and "hidden," population. However, despite this reality, it is noteworthy to mention because it suggests the findings be interpreted with caution and may not be generalizeable to other minority populations or other lesbian women and gay men for that matter. This is further complicated by the fact that only individuals who already outwardly self-identified as "gay" or "lesbian" participated in the study. Those "questioning" or who may be in the more beginning stages of identity development were likely not part of this sample. This methodological

challenge is well documented in lesbian and gay literature (Moradi et al 2009). Similarly, the use of snowball sampling further introduces the potential for a non-representative sample and limits the generalizability of results. Furthermore, while there was some diversity in regards to ethnic identity, the majority of participants identified as European/European American (71%). The sample was also older (mean age = 37.4 years) and educated (35% Associate's or Bachelor's Degree, and 43% Graduate Degree).

Thirdly, while the instrument created for this study lacks sufficient validation to accurately determine if its psychometric properties are sound.

Implications for Future Research

The current study contributed to the already established notion that minority stress experiences negatively impact identity development for minority populations – specifically, lesbian women and gay men. This study is also a preliminary step in the establishment of identifying factors that may interact with minority stress or salient experiences to impact identity development. However, given the limitations outlined above, there are several recommendations for future investigation.

First, conducting a similar study on a more diverse population and using a different measure to assess conceptual complexity or another similar variable – particularly if the study is conducted over the Internet – might yield more accurate information. Also, examining each type of minority stress experience individually (or identifying additional types) might assist in understanding the mechanism through which conceptual complexity interacts with those experiences to impact identity. This would

allow for the examination of each type of minority stress experience with greater detail (in this study each scale consisted of only 3-7 items).

In addition, while conceptual complexity is considered a “trait” variable, it is possible that certain environments (familial, social, geographic, etc.) influence the degree of conceptual complexity one displays either by reinforcing that way of thinking or inversely, discouraging it. Also, the role of religion was not examined in this study. It is possible that more dogmatic religions contribute to how flexibly an individual navigates the “coming out” process and/or is tied to the more dichotomous thinking that is associated with lower levels of conceptual complexity. It would be fruitful to measure those two variables individually to eliminate the inter-correlation between them or perhaps develop a more complex model for understanding conceptual complexity and its impact on identity.

Lastly, major authors within the field of lesbian and gay psychological research have agreed that sexual minority development is highly stressful (Boon & Miller, 1999; LaSala 2000) but can also be growth-enhancing (Balsam 2003; Moradi et al 2009). However, theory and research on sexual minority development has yet to systematically study what factors contribute to how that process is navigated and whether or not it results in growth-promotion (Bonet et al 2007). This gap highlights the need for more strengths-based/growth-focused research (Vaughan & Waeler 2010). The findings of the current study offer one potential variable (Complex Thinking) which may contribute to whether the coming out / identity development process is growth-promoting, or whether it has a deleterious impact on an individual. Complex Thinkers may have the cognitive

resources necessary to utilize the stressful aspects of “coming out” as growth promoting experiences rather than those stressful experiences contributing to difficulties related to their sexual minority identity. This potential link, however, requires further empirical investigation.

APPENDIX: MEASURES

Appendix A: Demographics Questionnaire

What is your current sex? (Male, Female, Intersexed)

What sex were you at birth? (Male, Female, Intersexed)

What is your race? (White, Black, Asian, Other)

What is your ethnicity? (Caucasian, Hispanic/Hispanic American, Black/African/African American, Asian/Pacific Islander, Native American, Middle eastern, Other)

What is your age?

What is the highest level of education you have completed? (High School/GED, Some College, Associate or Bachelor’s Degree, Graduate Degree)

Appendix B: Lesbian and Gay Identity Scale – Negative Identity Factor

For each of the following statements, mark the response that best indicates your experience as a lesbian or gay (LG) person. Please be as honest as possible in your responses.

1-----2-----3-----4-----5-----6-----7
Disagree Agree
Strongly Strongly

1. I prefer to keep my same-sex romantic relationships rather private.
2. I will never be able to accept my sexual orientation until all of the people in my life have accepted me.
3. I would rather be straight if I could.
4. Coming out to my friends and family has been a very lengthy process.
5. I keep careful control over who knows about my same-sex romantic relationships.
6. I often wonder whether others judge me for my sexual orientation.
7. I am glad to be an LG person.
8. My private sexual behavior is nobody's business.
9. I can't feel comfortable knowing that others judge me negatively for my sexual orientation.

10. Homosexual lifestyles are not as fulfilling as heterosexual lifestyles.
11. Admitting to myself that I'm an LG person has been a very painful process.
12. If you are not careful about whom you come out to, you can get very hurt.
13. Being an LG person makes me feel insecure around straight people.
14. I'm proud to be part of the LG community.
15. Developing as an LG person has been a fairly natural process for me.
16. I think very carefully before coming out to someone.
17. I think a lot about how my sexual orientation affects the way people see me.
18. Admitting to myself that I'm an LG person has been a very slow process.
19. My sexual orientation is a very personal and private matter.
20. I wish I were heterosexual.
21. I have felt comfortable with my sexual identity just about from the start.

Subscales

Internalized Homonegativity = average of items 3, 7*, 10, 14*, 20

Need for Privacy = average of items 1, 5, 8, 12, 16, 19

Need for Acceptance = average of items 2, 6, 9, 13, 17

Difficult Process = average of items 4, 11, 15*, 18, 21*

NOTE: Items followed by an * should be reverse scored

Appendix C: Lesbian and Gay Salient Experiences Questionnaire (LGSE)

Heightened Awareness

1) How often have you been in a situation where others assumed you were heterosexual and expressed this directly to you (e.g., if you are a female they asked you, “do you have a boyfriend/husband?” or vice versa if you are male)?

Never	Rarely	Sometimes	Often	Very Often
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2) How often have you been in a situation where people called attention to your sexuality?

Never	Rarely	Sometimes	Often	Very Often
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3) How often have you been in a situation where you became aware of being the only non-heterosexual person in a social situation?

Never	Rarely	Sometimes	Often	Very Often
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4) How often have you been in a situation where you felt awkward or uncomfortable because of your sexuality?

Never	Rarely	Sometimes	Often	Very Often
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Negative Affect

1) How often have you felt angry or upset about something said to you that felt discriminatory?

Never Rarely Sometimes Often Very Often

2) How often have you felt angry or upset about something done to you that felt discriminatory?

Never Rarely Sometimes Often Very Often

3) How often have you felt hurt or sad about something said to you that felt discriminatory?

Never Rarely Sometimes Often Very Often

4) How often have you felt hurt or sad about something done to you that felt discriminatory?

Never Rarely Sometimes Often Very Often

5) How often do you feel angry or upset about mainstream society's acceptance of gays and lesbians?

Never Rarely Sometimes Often Very Often

6) How often do you feel hurt or sad about mainstream society's acceptance of gays and lesbians?

Never Rarely Sometimes Often Very Often

Victimization

1) How often have you been the target of direct/open prejudice or an overt act of discrimination because of your sexuality?

Never Rarely Sometimes Often Very Often

2) How often have you been called a derogatory name (dyke, fag, etc.) relating to your sexuality?

Never Rarely Sometimes Often Very Often

3) How often have you been made fun of, picked on, hit, shoved, or threatened because of your sexuality?

Never Rarely Sometimes Often Very Often

4) How often have you had to take drastic action (filing a grievance, filing a lawsuit, quit a job, etc.) to deal with something discriminatory that was done to you?

Never Rarely Sometimes Often Very Often

5) How often have you been treated unfairly by people in service jobs (store clerks, bank tellers, waiters, etc.) because of your sexuality?

Never Rarely Sometimes Often Very Often

6) How often have you been treated unfairly by people in helping jobs (doctors, counselors, nurses, therapists, etc.) because of your sexuality?

Never Rarely Sometimes Often Very Often

7) How often have you been treated unfairly by institutions (the police, universities, courts, government agencies, etc.) because of your sexuality?

Never Rarely Sometimes Often Very Often

Family of Origin

1) Growing up, how often did your parents talk about homosexuality in an unfavorable manner?

Never Rarely Sometimes Often Very Often

2) Growing up, how often did you receive negatively toned messages about lesbian and gay individuals?

Never Rarely Sometimes Often Very Often

3) Growing up, how often did you receive positively toned messages about lesbian and gay individuals?

Never Rarely Sometimes Often Very Often

4) How accepting/rejecting were your parents of your sexuality when you first told them you were gay/lesbian?

Very Rejecting Rejecting Neutral Accepting Very
Accepting

Or

I'm not out to my parents

5) How accepting/rejecting are your parents of your sexuality now?

Very Rejecting Rejecting Neutral Accepting Very
Accepting

Or

I'm not out to my parents

Appendix D: Paragraph Completion Test (PCT)

Stems

- 1) When friends act differently towards me....
- 2) Rules....

Open-ended Questions

- 1) Some people feel too much money is spent on the exploring space and other planets, others find it an important endeavor. How do you feel?
- 2) Science has shown itself capable of killing and curing. Some feel there should be more restrictions on science and research, others believe there are too many. How do you feel?

REFERENCES

- Anderson, M.K. & Mavis, B.E. (1996). Sources of coming-out self-efficacy for lesbians. *Journal of Homosexuality*, 32, 37-52.
- Atkinson, D., Morten, G., & Sue, D.W. (1993). *Counseling American Minorities: A cross-cultural perspective*, 4th Edition, Madison, WI: W.C. Brown & Bechmark
- Baker-Brown, G., Ballard, E.J., Bluck, S., de Vries, B., Suedfeld, P. & Tetlock, P.E. (1992). Scoring manual for conceptual/integrative complexity. In Smith, C.P. (Ed.), *Handbook of thematic analysis*. Cambridge: Cambridge University Press.
- Balsam, K.F. (2007). Traumatic victimization in the lives of lesbian and bisexual women: A contextual approach. *Journal of Lesbian Studies*, 7(1), 1-14.
- Barendregt, C., van del Poel, A., & van de Mheen, D. (2005). Tracing selection effects in three non-probability samples. *European Addiction Research*, 11(3), 124-131.
- Balsam, K.F., & Mohr, J.J. (2007). Adaptation to sexual orientation stigma: A comparison of bisexual and lesbian/gay adults. *Journal of Counseling Psychology*, 54(3), 306-319.

- Baron, R.M. & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research. *Journal of Personality and Social Psychology*, 51, 1173-1186.
- Baron-Cohen, S. (2003). *The essential difference: Men, women, and the extreme male brain*. London: Penguin.
- Bayer, R. (1981). *Homosexuality and American psychology: The politics of diagnosis*. New York: Basic Books.
- Beck, A. T. (1972). *Depression: Causes and treatment*. Philadelphia: University of Pennsylvania Press.
- Bell, A.P., Weinberg, M.S., & Hammersmith, S.K. (1981). *Sexual preference: It's development in men and women*. Bloomington: Indiana University Press.
- Bohan, J. (1996). *Psychology and Sexual Orientation: Coming to Terms*. New York: Routledge Press.
- Boon, S.D. & Miller, R.J. (1999). Exploring the links between interpersonal trust and reasons underlying gay and bisexual males' disclosure of their sexual orientation to their mothers. *Journal of Homosexuality*, 37(3), 45-68.
- Bridgeman, D. (1981). Enhanced role taking through cooperative interdependence: A field study. *Child Development*, 52, 1231-1238.
- Brooks, V.R. (1981). *Minority stress and lesbian women*. Lexington, MA: Lexington Books.

- Brown, L.S. (1995). Lesbian identities: Concepts and issues. In D'Augelli, A.R. (Ed.) *Lesbian, Gay, and Bisexual Identities Across the Lifespan: Psychological Perspectives*. New York, NY: Oxford University Press.
- Bruch, M.A. Juster, H.R. & B.D. Heisler. (1982). Conceptual complexity as mediator of thought content and negative affect: Implications for cognitive *restructuring* interventions. *Journal of Counseling Psychology*, 29(4), 243-253.
- Burke, P. (1991). Identity process and social stress. *American Sociological Review*, 56, 836-849.
- Butler, A.C. & Beck, A.T. (1995). Cognitive therapy for depression. *The Clinical Psychologist*, 48(3), 3-15.
- Cass, V. (1979). Homosexual identity formation: A theoretical model. *Journal of Homosexuality*, 4, 219-235.
- Cass, V. (1990). The implications of homosexual identity formation for the Kinsey model and scale of sexual preference. In D.P. McWirther, S.A. Sanders, & J.M. Reinisch (Eds.), *Homosexuality/heterosexuality: The Kinsey scale and current research* (pp. 239-266). New York: Oxford University Press.
- Cass, V. (1996). Sexual orientation identity formation: A western phenomenon. In R.P. Cabaj & T.S. Stein (Eds.), *Textbook of homosexuality and mental health* (pp. 227-251). Washington, DC: American Psychiatric Press.
- Cochran, S.D. (2001). Emerging issues in research on lesbians' and gay men's mental health: Does sexual orientation really matter? *American Psychologist*, 56(11), 931-947.

- Cooper, C.L. & Payne, R. (1991). *Causes, coping, and consequences of stress at work*. Oxford, England: John Wiley and Sons.
- Coren, S. & Suedfeld, P. (1995). Personality correlates of conceptual complexity. *Journal of Social Behavior and Personality*, 10, 229-242.
- Coyle, A., Milton, M., and Annesley, P. (1999). The silencing of lesbian and gay voices in psychotherapeutic texts and training. *Changes: An International Journal of Psychology and Psychotherapy*, 17, 132-143.
- D'Augelli, A.R., & Garnets, L.D. (1995). Lesbian, gay, and bisexual communities. In A.R. D'Augelli & C.J. Patterson (Eds.), *Lesbian, gay, and bisexual communities over the lifespan: Psychological perspectives* (pp. 293-320). New York: Oxford University Press.
- Diamond, L.M. (2007). 'Having a Girlfriend Without Knowing It': Intimate Friendships Among Lesbian Sexual Minority Adolescents. *In: Sexualities & communication in everyday life: A reader*. Lovaas, Karen E. (Ed.); Jenkins, Mercilee M. (Ed.); Thousand Oaks, CA, US: Sage Publications, Inc, 2007. pp. 107-115.
- Einhorn, H.J. & Hogarth, R.M. (1981). Behavioral decision theory: Processes of judgment and choice. *Annual Review of Psychology*, 32, 53-88.
- Erikson, E. (1950). *Childhood and Society*. W.W. Norton and Company.
- Evans, N.J., & D'Augelli, A.R. (1996). Lesbians, gay men, and bisexual people in college. In R.C. Savin-Williams & K.M. Cohen (Eds.), *The Lives of Lesbians, Gays, and Bisexuals: Children to adults*, (pp. 201-226). Orlando, FL: Harcourt Brace.

- Fassinger, R.E. (1995). From invisibility to integration: Lesbian identity in the workplace. *The Career Development Quarterly*, 44, 148-167.
- Fassinger & Miller (1996). Validation of an inclusive model of sexual minority identity formation on a sample of gay men. *Journal of Homosexuality*, 32(2), 53-78.
- Finally, K.A., & Stephan, W.G. (2000). Improving intergroup relations: The effects of empathy on racial attitudes. *Journal of Applied Social Psychology*, 30(8), 1720-1737.
- Garnets, L. & Kimmel, D. (1991). Lesbian and gay male dimensions in the psychological study of human diversity. In J. Goodchilds (Ed.), *Psychological perspectives on human diversity in America: master lectures* (pp.143-192). Washington, DC: American Psychological Association.
- Garnets, Linda D. (2002). Sexual orientations in perspective. *Cultural Diversity and Ethnic Minority Psychology*, 8(2), 115-129.
- Goldstein, K.M. & Blackman, S. (1978). Cognitive complexity, maternal child rearing, and acquiescence. *Social Behavior and Personality*, 4(1), 97-103.
- Gonsiorek, J.C. (1995). Mental health and sexual orientation. In: *The lives of lesbians, gays, and bisexuals: Children to adults*. Savin-Williams, R.C. (Ed.). Orlando, FL: Harcourt Brace Publishers.
- Green, J.D., & Sedikides, C. (1999). Affect and self-focused attention revisited: The role of affect orientation. *Personality and Social Psychology Bulletin*, 25(1), 104-119.
- Greene, B., & Herek, G.M. (1994). Lesbian and gay psychology: Theory, research and clinical applications. Thousand Oaks, CA: Sage Publications.

- Grossman, A.H. & Kerner, A.S. (1998). Self-esteem and supportiveness as predictors of emotional distress in gay male and lesbian youth. *Journal of Homosexuality*, 35(2), 25-39.
- Harkless, L.E. & Fowers, B.J. (2005). Similarities and differences in relational boundaries among heterosexuals, gay men, and lesbians. *Psychology of Women Quarterly*, 29, 167-176.
- Harry, J. (1992). Conceptualizing anti-gay violence. In G.M. Herek & K.T. Berrill (Eds.), *Hate crimes: Confronting violence against lesbians and gay men* (pp. 113-122). London: Sage.
- Harvey, O.J., Hunt, D.E. & Schroder, H.M. (1961). *Conceptual systems and personality organization*. New York: Wiley.
- Hatzenbuehler, M.L. (2009). How does sexual minority stigma get 'under the skin?': A psychological mediational framework. *Psychological Bulletin*, 135(5), 707-730.
- Hequembourg, A.L. & Brailier, S.A. (2009). An exploration of sexual minority stress across lines of gender and sexual identity. *Journal of Homosexuality*, 56(3), 279-291.
- Herek, G.M. (2009). Sexual prejudice. In: *Handbook of prejudice, stereotyping, and discrimination*. Nelson, Todd D. (Ed.); New York, NY, US: Psychology Press, 441-467.
- Herek, G.M. & Berrill, K.T. (1992). *Hate Crimes: Confronting Violence Against Lesbians and Gay Men*. London: Sage.
- Holroyd & Lazarus (1982). Stress and coping ten years later. *Psychocritiques*, 31, 996.

- Hooker, E.A. (1957). The adjustment of the male overt homosexual. *Journal of Projective Techniques*, 21, 17-31.
- Horowitz, J.L., & Newcomb, M.D. (2001). A multidimensional approach to homosexual identity. *Journal of Homosexuality*, 42, 1-19.
- Hunt, D.E. & Dopyera, J. (1966). Personality variation in lower-class children. *Journal of Psychology: Interdisciplinary and Applied*, 67(1), 47-54.
- Kimmel, D.C. (1978). Adult development and aging: A gay perspective. *Journal of Social Issues*, 34, 113-130.
- Kimmel, D., Rose, T., & David, S. (2006). *Lesbians, gay, bisexual, and transgender aging: Research and clinical perspectives*. New York: Columbia University Press.
- King, L.A., & Smith, N.G. (2004). Gay and straight possible selves: Goals, identity, subjective well-being, and personality development. *Journal of Personality*, 72(5), 968-994.
- Kinsey, A.C., Pomeroy, W.B., & Martin, C.E. (1948). *Sexual behavior in the human male*. Philadelphia: W.B. Saunders.
- Kinsey, A.C., Pomeroy, W.B., Martin, C.E., & Gebhard, P.H. (1953). *Sexual behavior in the human female*. Philadelphia: W.B. Saunders.
- LaSala, M.C. (2000). Lesbians, gay men, and their parents: Family therapy for the coming out crisis. *Family Process*, 39(1), 67-81.
- Lazarus, R.S. (1982). Thoughts on the relation between emotion and cognition. *American Psychologist*, 37(9), 1019-1024.

- Lazarus, R.S. & Folkman, S. (1984). Cognitive theories and the issue of circularity. In: Dynamics of Stress and social perspectives. New York: Plenum Press.
- Levine, H. (1997). A further explanation of the lesbian identity development and its measurement. *Journal of Homosexuality*, 34, 67-78.
- Major, B. & O'Brien, L.T. (2005). The social psychology of stigma. *Annual Review of Psychology*, 56, 393-421.
- Marcia, J. E. (2001). A commentary on Seth Schwartz's review on identity theory and research. *An International Journal of Theory and Research*, 1, 59-65.
- Marcia, J.E. (1993). The relational roots of identity. In: *Discussions on Ego Identity*. Croger, Jane (Eds.). Hillsdale, NJ: Lawrence Erlbaum and Associates.
- Markowitz, L.M. (1991, January-February). Homosexuality: Are we still in the dark? *The Family Therapy Networker*, pp. 26-29, 31-35.
- Markus, H. & Smith, J. (1985). Role of self-concept in the perception of others. *Journal of Personality and Social Psychology*, 49(6), 1494-1512.
- Mays, V.M. & Cochran, S.D. (2001). Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. *American Journal of Public Health*, 91(11), 1869-1876.
- McCarn, S.R., & Fassinger, R.E. (1996). Revisioning sexual minority identity formation: A new model of lesbian identity and its implications for counseling and research. *The Counseling Psychologist*, 24, 508-534.
- McGregor, J. (1993). Effectiveness of role playing and antiracist teaching in reducing student prejudice. *Journal of Educational Research*, 86, 215-226.

- Merton, R.K. (1968). *Social Theory and Social Structure*. University of California: Free Press.
- Meyer, I.H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36, 38-46.
- Meyer, I.H. (2003). Prejudice, Social Stress, and Mental Health in Lesbian, Gay, and Bisexual Populations: Conceptual Issues and Research Evidence. *Psychological Bulletin*, 129(5), 674-697.
- Meyer, I.H., & Dean, L. (1988). Internalized homophobia, intimacy, and sexual behavior among gay and bisexual men. In: *Stigma and Sexual Orientation: Understanding Prejudice against Lesbians, Gay Men, and Bisexuals*. G.M. Herek (Ed.). Thousand Oaks, CA: Sage Publications.
- Mohr, J.J. & Fassinger, R.E. (2000). Measuring dimensions of lesbian and gay male experience. *Measurement and Evaluation in Counseling and Development*, 33(2), 66-93.
- Mohr, J.J. & Fassinger, R.E. (2003). Self-acceptance and self-disclosure of sexual orientation in lesbian, gay, and bisexual adults: An attachment perspective. *Journal of Counseling Psychology*, 30(4), 482-495.
- Morin, S.F., & Charles, K.A. (1983). Heterosexual bias in psychotherapy. In J. Murray, & P.R. Abramson (Eds), *Bias in psychotherapy* (pp. 309-338). New York: Praeger.

- Morris, J.F., Waldo, C.R., & Rothblum, E.D.(2001). A model of predictors and outcomes among lesbian and bisexual women. *American Journal of Orthopsychiatry*, 71, 61-72.
- Nisbett, R.E. & Ross, L. (1981). The person an the situation: Perspectives of Social Psychology. New York: McGraw-Hill Book Company.
- Peterson & Gerrity (2004). Internalized homophobia, lesbian identity development, and self-esteem in undergraduate women. *Journal of Homosexuality*, 50, 49-75.
- Phinney, J.S. (1990). Stages of ethnic identity development in minority group adolescents. *Journal of Early Adolescence*, 9, 34-49.
- Ploderl, M. & Fartacek, R. (2005). Suicidality and associated risk factors among lesbian, gay, and bisexual compared to heterosexual Austrian adults. *Suicide and Life-Threatening Behavior*, 35(6), 661-670.
- Potoczniak, D.J., Aldea, M.A., & DeBlaere, C. (2007). Ego identity, social anxiety, social support, and self-concealment in lesbian, gay, and bisexual individuals. *Journal of Counseling Psychology*, 54(4), pp. 447-457.
- Reynolds, A.L., & Hanjorgiris, W.F. (2000). Coming out: lesbian, gay, and bisexual identity development. In R.M. Perez, K.A. DeBord, & K.J. Bieschke (Eds), *Handbook of counseling and psychotherapy with lesbian, gay, and bisexual clients* (pp. 35-56). Washington, DC: American Psychological Association.
- Ritter, K.Y., & Tendrup, A.I. (2002). Handbook of Affirmative Psychotherapy with Lesbians and Gay Men. New York: Guilford Press.

- Rosario, M., Schrimshaw, E.W. & Hunter, J. (2004). Ethnic/racial differences in the coming out process of lesbian, gay, and bisexual youths: A comparison of sexual identity development over time. *Cultural Diversity and Ethnic Minority Psychology, 10*, 215-228.
- Rosario, M., Schrimshaw, E.W. & Hunter, J. (2008). Disclosure of sexual orientation and substance abuse among lesbian, gay, and bisexual youth: Critical role of disclosure reactions. *Psychology of Addictive Behaviors, 23*, 175-184.
- Rostosky, S.S. (2007). Minority stress experiences in committed same-sex couple relationships. *Professional Psychology: Research and Practice, 38*(4), 392-400.
- Rothblum, E. (1993). Gay and lesbian faulty face issues in academia. *APA Monitor*, September, p. 4.
- Safre, S.A. & Heimberg, R.G. (1999). Depression, hopelessness, suicidality, and related factors in sexual minority and heterosexual adolescents. *Journal of Consulting and Clinical Psychology, 67*(6), 859-866.
- Salais, D., & Fischer, R.B. (1995). Sexual preference and altruism. *Journal of Homosexuality, 28*, 185-196.
- Sargeant, M.J., Dickins, T.E., Davies, M.N.O., & Griffiths, M.D. (2006). Aggression, empathy, and sexual orientation in males. *Personality and Individual Differences, 40*, 475-486.
- Savin-Williams, R.C. (2001). *Mom, Dad, I'm gay*. Washington, D.C.: American Psychological Association.

- Schroder, H.M. (1970). Conceptual complexity and personality organization. In H.M. Schroder and P. Suedfeld (Eds.), *Personality Theory and Information Processing*. New York: Ronald Press Company.
- Slugoski, B.R., Marcia, J.E., & Koopman, R.F. (1984). Cognitive and social interactive characteristics of ego identity statuses in college males. *Journal of Personality and Social Psychology*, 47(3), 646-661.
- Smith, A. (1990). Social influence and antiprejudice training programs. In J. Edwards, R.S. Tisdale, L. Heath, & E.J. Posavec (Eds.), *Social Influence Process and Intervention* (pp. 183-196). New York: Plenum.
- Solarz, A.L. (1999). *Lesbian Health: Current Assessment and Direction for the Future*. Washington, DC: National Academy Press.
- Sophie, J. (1987). Counseling lesbians. In: Counseling non-ethnic American minorities. Atkinson, D.R. (Ed.). Springfield, IL: Charles C. Thomas Publisher, 307-318.
- Spencer, H. (1870). *The principles of psychology*. London: Williams and Norgate.
- Strong, S., Riggle, E.D.B., & Olson, A. (2008). The positive aspects of being a lesbian or gay man. *Professional Psychology: Research and Practice*, 39(2), 210-217.
- Suedfeld & Coren (1992). Conceptual/Integrative complexity. In C.P. Smith (Ed.), *Motivation and Personality: Handbook of Thematic Content Analysis* (393-399).
- Szymanski, D.M. (2009). Examining potential moderators between heterosexist events and gay and bisexual men's psychological distress. *Journal of Counseling Psychology*, 56(1), 142-151.

- Taylor, S.E. & Crocker, J. (1978). Schematic bases of social problem solving. *Personality and Social Psychology Bulletin*, 4(3), 447-451.
- Tetlock, P.E., Peterson, R.S., & Berry, J.M. (1993). Flattering and unflattering personality portraits of integratively simple and complex managers. *Journal of Personality and Social Psychology*, 63(3), 500-511.
- Troiden, R. R. (1989). The formation of homosexual identities. *Journal of Homosexuality*, 17, 43-73.
- Uba, L. (1994). Ethnic identity. *Asian American: Personality patterns, identity, and mental health*. New York: Guilford Press.
- Vaughan, M.D. & Waeler, C.A. (2010). Coming out growth: Conceptualizing and measuring stress-related growth associated with coming out to others as a sexual minority. *Journal of Adult Development*, (2) . *Special issue: Positive psychology and adult development*. pp. 94-109.
- Waldo, C.R. (1999). Working in a majority context: A structural model of heterosexism as minority stress in workplace. *Journal of Counseling Psychology*, 46(2), 218-232.
- Ware, R. & Harvey, O.J. (1967). A cognitive determinant of impression formation. *Journal of Personality and Social Psychology*, 5(1), 38-44.